Patricia M. French Senior Attorney



300 Friberg Parkway Westborough, Massachusetts 01581 (508) 836-7394 (508) 836-7039 (facsimile) pfrench@nisource.com

July 14, 2005

#### BY OVERNIGHT DELIVERY AND E-FILE

Mary L. Cottrell, Secretary Department of Telecommunications and Energy One South Station Boston, MA 02110

Re: Bay State Gas Company, D.T.E. 05-27

Dear Ms. Cottrell:

Enclosed for filing, on behalf of Bay State Gas Company ("Bay State"), please find Bay State's responses to the following Information Requests:

### From the Attorney General:

AG-8-25 AG-9-28 AG-9-32 AG-9-52 AG-22-44 (Bulk Supp.) AG-25-4

### From the Department:

DTE-11-6 DTE-18-03 DTE-18-04 DTE-18-05 DTE-18-06 DTE-18-07 DTE-18-08

### From the UWUA:

UWUA-1-5 (Bulk Supp.)

Please do not hesitate to telephone me with any questions whatsoever.

Very truly yours,

Patricia M. French

cc: Per Ground Rules Memorandum issued June 13, 2005:

Paul E. Osborne, Assistant Director – Rates and Rev. Requirements Div. (1 copy) A. John Sullivan, Rates and Rev. Requirements Div. (4 copies) Andreas Thanos, Assistant Director, Gas Division (1 copy) Alexander Cochis, Assistant Attorney General (4 copies) Service List (1 electronic copy)

## RESPONSE OF BAY STATE GAS COMPANY TO THE EIGHTH SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL D. T. E. 05-27

Date: July 14, 2005

Responsible: Earl M. Robinson, Consultant

AG-8-25

<u>Data</u> - Regarding reference at page 8 and elsewhere in Mr. Robinson's direct testimony to "future expectations" obtained from the Company, please provide all written documentation associated with each future expectation referenced, including but not limited to inquiries by the depreciation consultant and responses from the Company. The information should identify which accounts the information corresponded to and how each item of information affected the selection of any mortality characteristic, whether life or salvage related, and the degree to which it impacted the ultimate level of mortality characteristics proposed in the depreciation study. Finally, provide all underlying support and justification, including all workpapers, assumptions, considerations, and material reviewed and/or relied corresponding to each future expectation.

Response:

No such reference can be found on Page 8 of Mr. Robinson's direct testimony. A reference was found to future expectations on page 9 line 14 of the direct testimony.

Such expectations relate to how property is currently being operated and how such operations affect the accounting activity being generated and how current and future operations may change from the experience of the past. As a result of discussions with Company's management, it is anticipated for the most part, excluding the Company's Bare Steel program (and potential impact of the Company's Cast Iron Mains) and it Metscan devices, it is more or less business as usual with regard to the use of the property and the anticipated service life of the Company's assets. Material changes are not envisioned and/or estimated at the present time. With regard to net salvage factors, such costs have been increasing over time and are anticipated to escalate further in future years.

## RESPONSE OF BAY STATE GAS COMPANY TO THE NINTH SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL D. T. E. 05-27

Date: July 14, 2005

Responsible: Joseph A. Ferro, Manager Regulatory Policy

AG-9-28 Please survey the other Massachusetts LDCs to determine what their

tariff provisions and practices are regarding service to dual fuel

customers. Provide a summary that includes the Company's proposal. Indicate whether there are alternative fuel inventory requirements, and whether dual fuel customers must prove they are able to actually burn the

alternative fuel as needed.

Response: Please see response to DTE-7-11, and a copy of the NStar Dual Fuel

Special Provision tariff is included as Attachment AG-9-28.

NSTAR GAS COMPANY

M.D.T.E. No. 451 Cancels M.D.T.E. No. 276

Page 1 of 1

#### **DUAL FUEL SPECIAL PROVISION**

#### **APPLICABILITY**

This Special Provision is applicable to any Customer taking service on any one or more of the Company's General Service rates (Rates G-41, G-42, G-43, G-51, G-52 or G-53) able to engage in Fuel Switching.

#### **SPECIAL PROVISION**

Any new or existing Customer able to use an alternate source of energy to displace purchases of gas hereunder for economic reasons ("Fuel Switching") and wishing to take gas service hereunder for either: (1) gas-fired cogeneration equipment; or (2) gas utilization equipment designed to use either gas supplied by the Company or, at the Customer's option, any alternate source of energy, whether in whole or any other part (together, "Dual Fuel Equipment"); may not take service hereunder unless such Customer has executed a service agreement in form and substance acceptable to the Company. Such service agreement shall guarantee: (1) a minimum term of service of at least one (1) year, subject to termination upon ninety (90) days written notice to the Company, and (2) a minimum annual revenue, net of commodity-related revenues from the Company's Seasonal Cost of Gas Adjustment Clause. Such minimum annual revenue shall be determined by multiplying the rate of 18.71¢ per Therm (representing the fixed costs imposed upon the Company by serving the Customer) times the most recent annual gas-related energy requirements of the Customer's Dual Fuel Equipment, adjusted to Therm equivalents of gas. "Gas-related energy requirements" shall mean both the gas and the alternate source of energy consumed by the Customer's Dual Fuel Equipment. The gas-related energy requirements of the Customer's Dual Fuel Equipment shall be determined by the Company either from available historic gas usage information or from appropriate estimates thereof, as stated in the service agreement between the Company and the Customer.

In the event that the Company wishes to apply the minimum annual revenue guarantee defined in this Special Provision, it shall review with the Customer the Customer's most recent annual gasrelated energy requirements. The minimum annual revenue guarantee shall be applied during any annual period to the extent that the Customer has not taken gas service hereunder due to Fuel Switching during such annual period. The minimum annual revenue guarantee shall not be applied during such annual period to the extent that the Customer has failed to take gas service hereunder due either to mechanical failure of its Dual Fuel Equipment or to a reduction in the use of the Dual Fuel Equipment for reasons unrelated to Fuel Switching.

Filed: **Issued by: Thomas J. May January 31, 2003** 

**President** Effective: March 1, 2003

## RESPONSE OF BAY STATE GAS COMPANY TO THE NINTH SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL D. T. E. 05-27

Date: July 14, 2005

Responsible: Joseph A. Ferro, Manager Regulatory Policy

AG-9-32 Please survey the other Massachusetts LDCs to determine what their

tariff provisions and practices are regarding interruptible service. Provide a summary that includes the Company's proposal. Indicate whether there are requirements that interruptible customers must be dual fueled, and if so, alternative fuel inventory requirements, and whether dual fuel

customers must prove they are able to actually burn the alternative fuel

during periods of mandatory interruption.

Response: The Company has not conducted any formal survey of the other

Massachusetts LDCs on the matter of tariff provisions for interruptible

service. However, it is the Company's understanding that all

Massachusetts LDCs are complying with the Department's directive issued in D.P.U. 93-141-A, at 47 for any new interruptible service

contracts executed after the issuance date of that order. Please also see

response to MOC-3-4.

## RESPONSE OF BAY STATE GAS COMPANY TO THE NINTH SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL D. T. E. 05-27

Date: July 14, 2005

Responsible: Joseph A. Ferro, Manager Regulatory Policy

AG-9-52 Please provide copies of all special contracts that are currently in force,

copies of the original contacts with each special contract customer and copies of all amendments to these contracts. Provide a code for each special contract that corresponds to the data provided in the following

request response.

Response: Please see confidential response to AG-1-99. Also, please see response

to RR-AG-24.

## RESPONSE OF BAY STATE GAS COMPANY TO THE TWENTY-SECOND SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL

D. T. E. 05-27

Date: July 14, 2005

Responsible: James L. Harrison, Consultant (Cost Studies)
Joseph A. Ferro, Manager Regulatory Policy

### **BULK ATTACHMENTS - SUPPLEMENTAL RESPONSE**

AG-22-44

Refer to the Company's response to. Please provide revised exhibits to reflect the correction to the special contract revenues discussed in this response. Include an explanation of how each exhibit and schedule is affected. This should include the Company's proposed cost of service, the allocated cost of service studies, development of the rate design bill determinants and the individual class proposed rates.

Response:

As discussed in the Company's response to AG-9-2, the Company's original filing understated Special Contract revenues by \$404,852. Attachment AG-22-44 (1), which is a bulk document and will be provided in a supplement response, provides a revised version of the Delivery Component of the accounting class cost of service study. The special contract revenues were increased on page 8-1, Line 4 resulting in a lower revenue deficiency and a lower cost to serve to all rate classes.

Attachment AG-22-44 (2) presents a revised marginal cost study. As the marginal cost study results suggest, in the long run, changes in contract revenues have virtually no impact on the cost to serve the remaining customers. Recall that the marginal cost study revenue requirements are driven only by costs to serve and are not constrained by allowed revenue requirement that include an offset for special contract revenues.

Attachment AG-22-44 (3) summarizes the class cost of service study results for use in rate design. Rate design billing determinants exclude special contract customers' billing units, so the billing units are unimpacted by a change in special contract revenues.

Lastly, Attachment AG-22-44 (4) presents the results of a revised rate design. As the revised rate design demonstrates, the minor change to revenue requirements has an extremely small impact on the proposed rates.

### **SUPPLEMENTAL RESPONSE**

See Attachment AG-22-44 (1), which is being provided as noted above.

30-Jun-05

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

		RESIDENTIAL			HIGH WINTER	HIGH WIN EK	HIGH WIN IER	
ALLOC SUMMARY OF RESULTS	TOTAL COMPANY	HEATING R-3 & R-4	NON-HEATING R-1 & R-2	OUTDOOR LIGHTING	LOW ANNUAL G-40 & T-40	MED ANNUAL G-41 & T-41	HIGH ANNUAL G-42 & T-42	
PMENT OF RATE BASE Int in Service Depreciation Reserve bas Plant in Service	735,344,583 275,704,353 459,640,230	446,150,209 175,018,447 271,131,762	40,367,793 18,817,678 21,550,116	1,513 425 1,088	50,799,344 19,681,676 31,117,668	63,732,988 20,099,758 43,633,230	44,970,985 14,069,897 30,901,088	
Vorking Capital Is & Supplies Additions to Net Plant	9,959,014 3,408,069 13,367,083	6,203,184 2,065,294 8,268,479	684,895 186,491 871,385	26 7 33	705,334 235,452 940,786	796,996 295,926 1,092,922	498,884 209,737 708,621	
i. Taxes ritzed Pre-1971 ITC rer Contributions rer Deposits ned Checks Deductions to Net Plant	83,385,620 10,886 11,088 3,090,784 254,812 86,753,189	50,598,448 6,605 7,703 37,964 159,015 50,809,734	4,583,147 598 1,165 1,551 1,214 4,603,675	171 0 0 0 1 172	5,761,591 752 876 1,006,862 17,885 6,787,965	7,229,067 943 503 935,120 20,302 8,185,936	5,090,152 666 253 247,259 13,020 5,351,349	
e Base	386,254,124	228,590,507	17,817,826	948	25,270,489	36,540,215	26,258,360	
PMENT OF RETURN es from Sales of Gas perating Revenues Gas Operating Revenues	144,062,908 15,918,789 159,981,697	94,869,536 8,390,713 103,260,249	4,827,390 204,245 5,031,635	394 59 453	9,947,841 1,034,410 10,982,251	11,991,843 1,945,716 13,937,559	7,093,023 1,494,897 8,587,921	
PERATING EXPENSES on & Maintenance Expense lation & Amortization Expense Other Than Income on Customer Deposits Taxes Operating Expenses	86,286,405 34,563,572 9,775,438 72,506 7,061,245 137,759,166	53,748,281 21,542,084 5,938,109 891 6,021,052 87,250,416	5,956,449 2,288,766 542,618 36 (1,678,463) 7,109,407	222 54 20 0 51 347	6,115,577 2,472,016 676,351 23,620 374,824 9,662,388	6,895,650 2,756,481 850,898 21,937 920,799 11,445,765	4,314,731 1,797,485 565,925 5,800 438,881 7,142,823	
ng Income	22,222,531	16,009,834	(2,077,772)	107	1,319,863	2,491,794	1,445,098	
leturn Ie of Return	5.75% 1.000	7.00%	-11.66% -2.027	11.24% 1.953	5.22% 0.908	6.82%	5.50% 0.957	
	<b>9</b> .	ALLOC COMPA ARY OF RESULTS  TOF RATE BASE avice ation Reserve tt in Service tt in Service Capital piplies st to Net Plant tributions osits secks ons to Net Plant Sales of Gas ons to Net Plant tributions solis secks ons to Net Plant tributions solis s	ALLOC COMPANY R.3 & R. ALLOC COMPANY R.3 & R. TOF RATE BASE  TOF RATE BASE  TOF RATE BASE  TOF RATE BASE  TY35,344,583 446,15 ation Reserve  TY36,44,583 146,15 TY1,13 TY1	ALLOC COMPANY R-3 & R-4 R-1  TOF RATE BASE  TOF TOF RATE BASE  TOF TOF RATE BASE  TOF TOF RATE BASE  TOF	ARY OF RESULTS  ALLOC COMPANY R.3 & R-4 R.1 & R-1 & R-2 LIGHTING  TOF RATE BASE  TY35,344,583 446,150,209 40,367,793 1.5  ation Reserve 459,640,230 271,131,762 21,550,116 1.0  Capital piles  Thin Service 459,640,230 271,131,762 21,550,116 1.0  Capital polies  The Plant 1 8,385,620 20,588,448 684,895 186,491  Service 10 Net Plant 1 1,367,083 8,286,479 871,385 1.1  Service 10 Net Plant 1 1,581 28,885,620 1,1686 6,605 1,1686 1,1581  Seles of Gas 3,090,774 2,1984 1,581 1,1585  TOF RETURN 2,598,742 228,590,507 17,817,826 9,886,286,498 1,591,878 1,1591,817,828 1,1691,818,789 1,1691,819 1,1691,819 1,1691,819 1,1691,819 1,1691,819 1,1691,819 1,1691,819 1,1691,819 1,1691,819 1,1991,8191,81	ALLOC         COMPANY         R.3 R.4         R.1 B.R.2         LIGHTING         G-40 & T           CP RATE BASE         TOF RATE BASE         TOP RATE BASE	OF PATE BASE         ALLOC         COMPANY         R.3 &R-4         R.1 & R.2         LIGHTING         G-40 & T-40         G-41 & T-41           OF RATE BASE         TOF RATE BASE         TOF RATE BASE         TOF RATE BASE         TO T-42 TABLE ALIGNES         TO T-42 TABLE ALIGNES	OF EATLING         COMPANY         R-3 & R-4         R-1 & R-2         LIGHTING         C-40 & T-40         C-41 & T-41         G-42 & R-4           OF EATLING         TOF RATE BASE         TOF RATE BASE         TOF RATE BASE         TOF RATE BASE         C-41 & T-41         G-41 & T-41         G-42 & R-4           OF BASE ALE SASE         TOF SAGE ALE SASE         TASC ALE SASE ALE SA

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 1 of 322

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DELIVERY COMPONENTS

LOW WINTER	G-53 & T-53	32,439,258 9,395,131 23,044,126	358,756 150,854 509,611	3,672,849 480 53 16,653 9,127 3,699,162	19,854,575	5,852,896 1,216,647 7,069,543	3,102,485 1,204,437 424,924 391 690,117 5,422,354	1,647,190	8.30%
LOW WINTER	G-52 & T-52	19,025,787 5,943,786 13,082,001	214,707 88,677 303,385	2,154,304 282 114 118,452 5,600 2,278,752	11,106,633	3,347,044 621,176 3,968,220	1,856,958 771,858 248,983 2,779 299,688 3,180,266	787,954	7.09%
LOW WINTER	MED ANNOAL G-51 & T-51	19,894,459 6,437,393 13,457,066	259,266 92,306 351,572	2,258,444 295 204 396,375 6,636 2,661,953	11,146,685	3,312,780 547,066 3,859,846	2,243,318 909,411 267,942 9,298 41,105 3,471,074	388,771	3.49%
LOW WINTER	G-50 & T-50	9,757,141 3,869,343 5,887,798	146,113 45,162 191,275	1,108,436 144 204 244,033 3,717 1,356,534	4,722,538	1,807,765 154,289 1,962,055	1,267,065 516,079 132,183 5,725 (38,135) 1,882,918	79,137	1.68%
HIGH WINTER	LKG HI ANNUAL G-43 & T-43	8,205,107 2,370,819 5,834,288	90,853 38,162 129,015	929,010 121 13 86,516 2,295 1,017,956	4,945,346	1,012,397 309,570 1,321,966	785,667 304,901 107,485 2,030 (8,674) 1,191,409	130,557	2.64% 0.459
	ALLOC						es es		
DELIVERY COMPONENTS	SUMMARY OF RESULTS	DEVELOPMENT OF RATE BASE Gas Plant in Service Less: Depreciation Reserve Net Gas Plant in Service	ADD: Cash Working Capitai Materiais & Supplies Total Additions to Net Plant	DEDUCT: Deferred Taxes Unamortized Pre-1971 ITC Customer Contributions Customer Deposits Unclaimed Checks Total Deductions to Net Plant	Total Rate Base	DEVELOPMENT OF RETURN Revenues from Sales of Gas Other Operating Revenues Total Gas Operating Revenues	LESS: OPERATING EXPENSES Operation & Maintenance Expense Depreciation & Amortization Expense Taxes Other Than Income Interest on Customer Deposits income Taxes Total Operating Expenses	Operating Income	Rate of Return Index Rate of Return
		- 7 c	4 rv @	7 7 8 9 9 11 11 12 12 12 12 12 12 12 12 12 12 12	13 T	4 t t	L 17 18 19 20 21 22	23	24 F 25 II

Attachment AG-22-44

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HIGH WINTER HIGH ANNUAL G-42 & T-42	264,200 (223,126) 41,075 1,879,353 1,920,428	7,245 2,821 1,246 11,312 30,706	16,455 64,950 118,974 15,838 4,818 1,806 22,461 422,993 640,691	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 3 of 322
HIGH WINTER MED ANNUAL G-41 & T-41	374,425 (316,213) 58,212 2,935,102 2,993,314	9,258 3,605 1,593 14,457 39,242	21,030 83,004 152,046 20,240 6,157 2,308 28,705 540,575 818,788	
HIGH WINTER LOW ANNUAL G-40 & T-40	298,441 (252,043) 46,399 2,310,580 2,356,979	4,553 1,773 783 7,109 19,297 11,179	10,341 40,817 74,768 9,953 3,028 1,135 14,116 265,825 402,634	
OUTDOOR LIGHTING	9 (8) + 59 69 69	0000	- 1	
RESIDENTIAL NON-HEATING R-1 & R-2	237,157 (200,286) 36,871 1,898,719 1,935,590	767 299 132 1,197 3,249 1,882	1,741 6,872 12,589 1,676 510 191 2,377 44,757 67,792	
RESIDENTIAL HEATING R-3 & R-4	2,621,092 (2,213,589) 407,503 20,261,541 20,669,043	39,982 15,569 6,878 62,429 169,461 98,171	90,815 90,815 358,447 656,599 87,406 26,589 9,965 123,960 2,334,429 3,535,866	
TOTAL	4,320,082 (3,648,436) 671,646 33,253,272 33,924,918	75,571 29,429 13,001 118,001 320,307 185,559	17,654 677,520 1,241,073 165,211 50,257 18,836 234,304 4,412,427 6,683,325	
ALLOC	PLANT PLANT LABOR	DEMLNG DEMLPG PLT304L DEMLNG DEMLNG	DEMLPG DEMLPG DEMLPG PLT320L DEMLNG	
DELIVERY COMPONENTS  DEVELOPMENT OF RATE BASE-2  GAS PLANT IN SERVICE	iNTANGIBLE PLANT 301 Organization 1 Organization 2 Adj Organization 3 Total Account 301 4 303 Misc. Intangible Plant 5 Total Intangible Plant	<b>8</b> 8	82 82.	

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LOW WINTER L	51 G-52 & T-52 G-53 & T-53			(94,397)	17,378	946,868 809,631 1,386,788 965,039 827,009 1,416,417		!!!	3,017		519	4,047 4,710 9,365	. ,		6,363 7,407 14,727		27,045			6,595				151,312 176,135 350,188	266.784
LOW WINTER MED ANNUAL	G-51 & T-51																								
LOW WINTER LOW ANNUAL	G-50 & T-50			57,322 (48,410)	8,94	473,745 482,657			643	251		1,005		2,72	1,580	1,46	5,76	10,56		1,407	428	160	1,995	37,566	56.89
HIGH WINTER LRG HI ANNUAL	G-43 & T-43			48,204 (40,710)	7,494	350,882 358,376			1,518	591	261	2,370		6,434	3,727	3,448	13,609	24,929		3,319	1,009	378	4,706	88,630	134.244
	ALLOC			PLANT PLANT		LABOR			DEMLNG	DEMLPG	PLT304L			DEMLNG	DEMLPG	PLT305L		DEMLPG		DEMLNG	DEMLPG	PLT320L		DEMLNG	
DELIVERY COMPONENTS	DEVELOPMENT OF RATE BASE-2	GAS PLANT IN SERVICE	INTANGIBLE PLANT 301 Organization		3 Total Account 301	303	PRODUCTION PLANT	304 Land & Land Rights	6 LNG Related	7 LPG Related		9 Total Account 304	305 Structures & Improvements	10 LNG Related	11 LPG Related	12 LNG & LPG Related		311	320 Other Equipment	15 LNG Related	16 LPG Related	17 LNG & LPG Related		321	

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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HIGH WINTER HIGH ANNUAL G-42 & T-42

HIGH WINTER MED ANNUAL G-41 & T-41	26,835 9,685 258,330	312,940 2,452,779 697,209 1,613,741 17,901,054 15,445,803 129,081 37,952,606 40,094 1,513,655 6,169,869 2,385,861 4,328,031 1,303,439	1,721,708 69,801 959,900 2,751,410 210,667 56,950,481	62,512
HIGH WINTER LOW ANNUAL G-40 & T-40	13,196 4,762 127,032	153,886 1,206,139 3,42,848 498,501 8,802,732 7,595,377 63,475 19,716 744,330 17,786,084 2,023,106 3,669,983 1,105,260	846,639 34,324 472,025 1,352,989 103,594 45,703,010	30,740
OUTDOOR	- 0 8	10 78 22 32 570 491 1,207 1 48 0	55 2 31 88 7 1,361	2 2
RESIDENTIAL NON-HEATING R-1 & R-2	2,222 802 21,388	25,910 203,078 57,725 83,933 1,482,119 1,278,837 10,687 3,142,289 3,142,289 125,323 24,984,666 2,339,184 4,243,357 1,277,938	142,549 5,779 79,475 227,803 17,442 36,385,734	5,176
RESIDENTIAL HEATING R-3 & R-4	115,885 41,823 1,115,578	1,351,404 10,592,119 3,010,837 4,377,756 77,304,202 66,701,405 557,426 173,142 6,5385,149 173,142 6,536,592 166,042,757 15,188,301 27,552,090 8,297,644	7,435,052 301,432 4,145,249 11,881,733 909,746 401,750,440	269,953 269,953
TOTAL	219,041 79,051 2,108,612	2,554,359 20,020,721 5,690,941 8,274,626 146,116,729 126,075,826 1,053,621 309,786,822 327,265 12,355,156 228,746,364 24,915,914 45,198,411 13,612,047	14,053,382 569,752 7,835,153 22,458,288 1,719,559 661,526,587	510,252
ALLOC	DISTR DISTR DISTR	DISTR DISTR DISTR DISTR DISTR DISTR DISTR DISTR CUST380 CUST382 CUST383	CUST3860 CUST3862 CUST3863 DISTR	DISTR
DELIVERY COMPONENTS DEVELOPMENT OF RATE BASE CONT-3	GAS PLANT IN SERVICE CON'T  DISTRIBUTION PLANT  364 Land & Land Rights  2 365 Right of Way  3 366 Stuctures & Improvements		386 Other Property on Cust's Premises 18 Gas Water Heaters 19 Cascade Diamond Boilers 20 Conversion Burners 21 Total Account 386 22 387 Other Equipment 23 Total Distribution Plant	TRANSMISSION PLANT 24 379 Other Equipment 25 Total Transmission Plant
	4 21 8		~ ← ⊠ ⋈ ⋈ ⋈	00

244,871 1,919,268 545,557 793,240 14,007,349 12,086,145 101,004 29,697,435 31,373 1,184,416 4,778,556 7,778,556 7,778,556 7,778,556 7,778,556 7,778,556 7,778,556 1,347,215 54,619 751,110 2,152,944 164,844 40,595,023 48,915 48,915

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 5 of 322

11:19 AM

30-Jun-05

	DELIVERY COMPONENTS		HIGH WINTER	LOW WINTER	LOW WINTER	LOW WINTER	LOW WINTER
	DEVELOPMENT OF RATE BASE CONT-3	ALLOC	LRG HI ANNUAL G-43 & T-43	LOW ANNUAL G-50 & T-50	MED ANNUAL G-51 & T-51	HIGH ANNUAL G-52 & T-52	LRG HI ANNUAL G-53 & T-53
	GAS PLANT IN SERVICE CON'T						
	DISTRIBUTION PLANT						:
Ψ-	364 Land & Land Rights	DISTR	4,400	1,865	7,511	8,744	17,384
2	365 Right of Way	DISTR	1,588	673	2,711	3,156	6,274
က	366 Structures & Improvements 367 Gas Mains	DISTR	42,355	17,952	72,309	84,171	167,348
A	Gas Mains - Bare Steel	DISTR	51.308	21,747	87,595	101,965	202,724
- יכי	Gas Mains - Joint Clamping	DISTR	402,146	170,449	686,554	799,185	1,588,925
) (C	Gas Mains - Cast Iron	DISTR	114,311	48,451	195,155	227,170	451,656
^	Gas Mains - Cathodic Protection	DISTR	166,208	70,447	283,755	330,306	656,708
00	Gas Mains - Coated Steel	DISTR	2,934,970	1,243,984	5,010,662	5,832,673	11,596,414
6	Gas Mains - Plastic	DISTR	2,532,419	1,073,363	4,323,416	5,032,682	10,005,887
10	Adi Gas Mains - Plastic	DISTR	21,164	8,970	36,131	42,058	83,620
<del>-</del>	Total Account 367		6,222,526	2,637,410	10,623,268	12,366,039	24,585,934
12	368 Compressor Station Equipment	DISTR	6,574	2,786	11,223	13,064	25,973
13	369 Meas. & Reg. Station Equipment	DISTR	248,172	105,187	423,685	493,192	980,555
14	380 Gas Services	CUST380	203,287	3,565,851	2,310,269	1,922,133	892,892
15	381 Gas Meters	CUST381	49,813	647,509	1,022,284	382,655	176,519
16	382 Meter Installations	CUST382	90,363	1,174,602	1,854,457	694,148	320,211
17	383 Gas Regulators	CUST383	27,214	353,746	558,492	209,051	96,435
	386 Other Property on Cust's Premises						
6	Gas Water Heaters	CUST3860	282,283	119,645	481,921	560,982	1,115,333
19	Cascade Diamond Boilers	CUST3862	11,444	4,851	19,538	22,743	45,218
20	Conversion Burners	CUST3863	157,381	90,706	268,685	312,763	621,829
2	Total Account 386		451,108	191,202	770,144	896,488	1,782,380
3	387 Other Equipment	DISTR	34,540	14,640	58,967	68,641	136,471
23	Total Distribution Plant		7,381,938	8,713,423	17,715,320	17,141,481	29,188,376
	TRANSMISSION PLANT						
24	379 Other Equipment	DISTR	10,249	4,344	17,498	20,368	40,496
25	Total Transmission Plant		10,249	4,344	17,498	20,368	40,496

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 7 of 322

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	
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	DELIVERY COMPONENTS		IATOTA	RESIDENTIAL HEATING	RESIDENTIAL	OUTDOOR		HIGH WINTER	HIGH WINTER MED ANNIAI	HIGH WINTER HIGH ANNUAL
)EVEL(	DEVELOPMENT OF RATE BASE CONT-4	ALLOC	COMPANY	R-3 & R-4	R-1 & R-2	LIGHTING		G-40 & T-40	G-41 & T-41	G-42 & T-42
AS PL	GAS PLANT IN SERVICE CON'T									
ENER/ 389 La 390 St Total	GENERAL PLANT 389 Land & Land Rights 390 Structures & Improvements Total General Plant	LABOR LABOR	165,740 7,024,876 7,190,616	100,987 4,280,325 4,381,312	9,464 401,111 410,575	0 4 4		11,516 488,118 499,635	14,629 620,051 634,680	9,367 397,020 406,387
<b>ENER</b> 391 O	GENERAL PLANT (Equipment) 391 Office Equipment									
) <u>I</u>	Office Equipment	LABOR	5,691,965	3,468,170	325,004	<del>-</del>	: : :	395,502	502,402	321,689
Ö	Office IT Equipment	LABOR	5,292,227	3,224,605	302,179	10		367,727	467,119	299,097
Tota	Total Account 391		10,984,193	6,692,775	627,183	21		763,229	969,520	620,786
392 Tra	392 Transportation Equipment	LABOR	2,273,324	1,385,158	129,804	4		157,960	200,655	128,480
393 Sto	393 Stores Equipment	LABOR	48,545	29,579	2,772	0		3,373	4,285	2,744
394 Toc	394 Tools, Shop & Garage Equipment	LABOR	1,777,361	1,082,963	101,485	က		123,499	156,879	100,450
396 Pov	396 Power Operated Equipment	LABOR	390,903	238,181	22,320	<del></del>		27,162	34,503	22,092
397 Co	397 Communication Equipment									
Comi	Communications Equip & Metscan	LABOR	12,183,123	7,423,295	695,641	24		846,536	1,075,344	688,545
Com	Communications Equip Metscan Adj	LABOR	(5,065,440)	(3,086,421)	(289,230)	(10)		(351,968)	(447,101)	(286,280)
Com	Communications Equip Metscan	PLT381	644,449	392,844	60,503	0		52,327	61,710	18,125
Com	Communications Equip ERT/ITRON	PLT381	2,248,171	1,370,442	211,065	0		182,545	215,277	63,228
Tot	Total Account 397		10,010,304	6,100,159	876,779	14		729,440	905,229	483,618
398 Mi	398 Miscellaneous Equipment	LABOR	24,257	14,780	1,385	0		1,685	2,141	1,371
Ţō	Total General Plant (Equipment)		25,508,886	15,543,596	1,562,927	44		1,806,348	2,273,213	1,359,541
Total G	Total Gas Plant In Service		735,344,583	446,150,209	40,367,793	1,513		50,799,344	63,732,988	44,970,985

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BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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DEVELOPMENT OF RATE BASE CONT-4         ALLOC         G-43 & T-43           SAS PLANT IN SERVICE CONT           SENERAL PLANT           SENICE CONT         LABOR         1,749           389 Land & Land Rights         LABOR         74,125           390 Structures & Improvements         LABOR         75,874           SENERAL PLANT (Equipment)         391 Office Equipment         1,749           391 Office Equipment         LABOR         60,060           Office I Tequipment         LABOR         55,842           Total Account 391         LABOR         55,842           Total Account 391         LABOR         55,842           392 Transportation Equipment         LABOR         55,842           393 Stores Equipment         LABOR         55,842           394 Tools, Shop & Garage Equipment         LABOR         12,754           395 Communication Equipment         LABOR         128,554           Communication Equip Metscan         LABOR         128,554           Communications Equip Metscan         1280R         12,28           Communications Equip Metscan         12,80           Communications Equip Metscan         12,80           Communications Equip ERT/ITRON         PLT381         4,495	LKG HI ANNUAL G-43 & T-43 1,749 74,125 75,874 60,060 55,842 115,903 23,988 512 115,903 128,554 4,125 (53,449) 1,288 4,495		10W ANNUAL G-50 & T-50 2.361 100,080 102,442 75,396 156,487 32,387 692 25,321 5,569 173,568 (72,165) 16,748 5,549 173,568	MED ANNUAL G-51 & T-51 G-51 & T-51 C00,029 C04,749 150,693 312,769 64,732 1,382 50,609 11,131 346,907 (144,235) 26,441 92,441	HIGH ANNUAL G-52 & T-52 4,035 177,038 175,073 138,585 128,852 267,437 55,350 1,182 43,274 9,517 296,627 (123,330) 9,897 3,4527	G-53 & T-53 G-53 & T-53 G-53 & T-53 292,964 299,876 220,706 458,083 94,806 2,025 74,123 16,302 508,083 4,566 15,327	
i otar Account 397 398 Miscellaneous Equipment Total General Plant (Equipment) Total Gas Plant in Service	LABOR	80,887 256 244,425 8,205,107	176,573 346 397,377 9,757,141	321,334 691 762,667 19,894,459	591 591 595,072 19,025,787	32,439,258	

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 9 of 322

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

Attachment AG-22-44

HIGH WINTER HIGH ANNUAL G-42 & T-42	206,394 (175,030) 31,364 1,017,434 1,048,798	42,496 91,014 7,960 104,430 245,900	151 146,204 7,612,531 23,979 348,582 2,593,702 283,832 295,633	284,045 42,559 138,444 465,048 35,602 11,956,735
HIGH WINTER MED ANNUAL G-41 & T-41	292,501 (248,052) 44,449 1,588,990 1,633,439	54,309 116,314 10,173 133,459 314,255	193 186,846 9,728,631 30,645 445,479 3,348,879 966,382 1,006,562 515,720	363,002 54,389 176,928 594,320 45,499 16,869,154
HIGH WINTER LOW ANNUAL G-40 & T-40	233,143 (197,714) 35,429 1,250,889 1,286,318	26,706 57,197 5,002 65,628 154,533	95 91,880 4,783,994 15,069 219,061 9,702,773 819,450 853,521 853,521	178,504 26,745 87,003 292,253 22,374 17,237,778
OUTDOOR LIGHTING	7 (6) 1 35 36	0 4 0 4 0	0 9 0 1	12 6 1 19 15 15 15
RESIDENTIAL NON-HEATING R-1 & R-2	185,267 (157,114) 28,154 1,027,918 1,056,072	4,497 9,630 842 11,050 26,019	15,470 805,483 2,537 36,883 13,561,166 947,476 986,869	30,055 4,503 14,649 49,207 3,767 16,914,504
RESIDENTIAL HEATING R-3 & R-4	2,047,599 (1,736,442) 311,157 10,969,083 11,280,240	234,530 502,293 43,929 576,331 1,357,083	832 806,878 42,012,278 132,336 1,923,763 90,124,612 6,151,953 6,407,736 3,283,053	1,567,595 234,875 764,051 2,566,520 196,483 153,606,444
TOTAL COMPANY	3,374,852 (2,862,002) 512,850 18,002,476 18,515,326	443.298 949,410 83,033 1,089,353 2,565,094	1,573 1,525,122 79,409,611 250,135 3,636,205 124,158,847 10,092,102 10,511,706 5,385,754	2,962,994 443,949 1,444,172 4,851,115 371,382 240,193,554
ALLOC 5	PLT301 PLT301 PLT303	PLT305 PLT311 PLT320 PLT321	PLT365 PLT366 PLT367 PLT369 PLT380 PLT381 PLT381	PLT3860 PLT3862 PLT3863 PLT387
DELIVERY COMPONENTS DEVELOPMENT OF RATE BASE CONT-5 DEPRECIATION RESERVE	inTangible PLant RESERVE 301 Organization Organization Adj Organization Total Account 301 303 Misc. Intangible Plant Total Intangible Plant	PRODUCTION PLANT RESERVE 305 Structures & Improvements 311 L.P. Gas Equipment 320 Other Equipment 321 L.N.G. Equipment Total Production Plant Reserve	DISTRIBUTION PLANT RESERVE 365 Right of Way 366 Structures & Improvements 367 Gas Mains 368 Compressor Station Equipment 369 Meas. & Reg. Station Equipment 380 Gas Services 381 Gas Meters 382 Meter Installations 383 Gas Regulators 383 Gas Regulators 384 Gas Regulators 385 Ghear Directors	
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LOW WINTER LRG HI ANNUAL	G-53 & 1-53			148,879	(126,255)	750.772	773,396	0E 400	30,102	6 500	6,330 86.455	203.576			125	121,040	6,302,268	19,852	288,584	484,644	71,498	74,471	38,156		235,155	35,234	114,615	385,004	29,474	7,815,114
LOW WINTER HIGH ANNUAL	G-52 & I-52		3	87,319	(74,049)	438,314	451,583	7	060,71	37,898	43.485	102.393			. 63	60,880	3,169,865	9,985	145,150	1,043,294	154,993	161,437	82,713		118,276	17,722	57,648	193,646	14,825	5,036,850
LOW WINTER MED ANNUAL	G-51 & 1-51			91,305	(77,430)	512,610	526,485	000	207,01	32,557	37 356	87.963			54	52,300	2,723,129	8,578	124,693	1,253,967	414,071	431,287	220,973		101,608	15,224	49,524	166,355	12,736	5,408,144
LOW WINTER	G-50 & I-50			44,780	(37,975)	256 473	263,278	477	47.00	8,083	9274	21,838	2001		13	12,984	676,064	2,130	30,957	1,935,471	262,271	273,175	139,963		25,226	3,780	12,295	41,301	3,162	3,377,491
HIGH WINTER LRG HI ANNUAL	G-43 & 1-43			37,657	(31,935)	3,722 180,053	195,681		40,80	19,070	1,000	51 524	140.00		32	30,634	1,595,059	5,024	73,039	110,340	20,177	21,016	10,768		59,516	8,917	29,008	97,442	7,460	1,970,989
:	ALLOC			PLT301	PLT301	DI T303	200	i c	PL 1305	PLT311	PL 1320	17011			PLT365	PLT366	PLT367	PLT368	PLT369	PLT380	PLT381	Pt.T382	PLT383		PLT3860	PLT3862	Pt_T3863		PLT387	
DELIVERY COMPONENTS	DEVELOPMENT OF RATE BASE CONT-5	DEPRECIATION RESERVE	INTANGIBLE PLANT RESERVE 301 Organization	Organization	Adj Organization	10tal Account 301	Total Intangible Plant Reserve	PRODUCTION PLANT RESERVE	305 Structures & Improvements	311 L.P. Gas Equipment	320 Other Equipment	7541 Description Direction	iotal michaelmant neserve	DISTRIBUTION PLANT RESERVE	365 Right of Way	366 Structures & Improvements	367 Gas Mains	368 Compressor Station Equipment	369 Meas. & Reg. Station Equipment	380 Gas Services	381 Gas Meters	382 Meter Installations	383 Gas Regulators	386 Other Property on Cust's Premises	Gas Water Heaters	Cascade Diamond Boilers	Conversion Burners	Total Account 386	387 Other Equipment	Total Distribution Plant Reserve
				τ	2	7) T	\$ £0	•	Ø	٠- ١	<b>x</b> c	y 5	2		-	12	13	7	15	16	17	38	5		20	21	23	23	24	25

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	DELIVERY COMPONENTS			DECIDENTIA	DESTRENTIAL		HICH WINTER	ASTNIW HOIH	ABLUIW HUIH
		0	TOTAL	HEATING	NON-HEATING	OUTDOOR	LOW ANNUAL	MED ANNUAL	HIGH ANNUAL
	DEVELOPMENT OF RATE BASE CONT-6	ALLOC	COMPANY	K-3 & K-4	אַ-; אַ אַ-,	EGH ENG	01-1 & 01-5	# 8 # 9	71-1 8 71-5
	DEPRECIATION RESERVE CON'T								
7 7	TRANSMISSION PLANT RESERVE 379 Other Equipment Total Transmission Plant Reserve	PLT379	223,628 223,628	118,312 118,312	2,268	~ ~	13,472 13,472	27,397 27,397	21,438
ಬ 4	GENERAL PLANT RESERVE 390 Structures & Improvements Total General Plant Reserve	PLT390	2,105,067	1,282,638	120,197 120,197	ধ ধ	146,269	185,804 185,804	118,971
ĸ	GENERAL PLT RESERVE (Equipment)	PLT391	7.359.878	4.484,445	420,240	4-	511,396	649,620	415,953
တ	uipment	PLT392	1,235,923	753,060	70,570	2	85,877	109,089	69,850
7		PLT393	(1,893)	(1,153)	(108)	(0)	(132)	(167)	(107)
00	rage Equipment	PLT394	783,581	477,443	44,741	2	54,447	69,163	44,285
6		PLT396	168,030	102,382	9,594	0	11,675	14,831	9,496
,	397 Communication Equipment	Ozoot IG	4 208 667	7 290 150	251 159	c	305 838	389 240	248 596
2 4	Communications Equip Metscan Communications Equip Metscan Adi	PL 13970 Pl T3970	(2.063.285)	(1.257.179)	(117.811)	ů ( <del>4</del> )	(143.366)	(182,116)	(116,609)
12	Communications Equip Metscan	PLT397M	157,481	95,997	14,785	0	12,787	15,080	4,429
<u> </u>	Communications Equip ERT/(TRON	PLT397E	49,882	30,407	4,683	0	4,050	4,777	1,403
14	Total Account 397		2,542,745	1,549,375	152,815	co	179,110	225,989	137,819
15	398 Miscellaneous Equipment	PLT398	13,422	8,178	766	0	933	1,185	759
16	Tot Gen Pit Reserve (Equipment)		12,101,685	7,373,730	698,618	23	843,306	1,069,709	678,055
17	Total Depreciation Reserve		275,704,353	175,018,447	18,817,678	425	19,681,676	20,099,758	14,069,897
19	Net Gas Plant in Service		459,640,230	271,131,762	21,550,116	1,088	31,117,668	43,633,230	30,901,088

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 13 of 322

ALLOC DEVELOPMENT OF RATE BASE CONT-7 ADDITIONS TO NET PLANT Cash Working Capital Purchased Gas Other O&M Total Cash Working Capital	TOTAL	HEATING	NON-HEATING	OUTDOOR	LOW ANNUAL	MED ANNUAL	HIGH ANNUAL
NNT apital	OC COMPANY	R-3 & R-4	R-1 & R-2	LIGHTING	G-40 & T-40	G-41 & T-41	G-42 & T-42
	0 9,959,014 9,959,014	0 6,203,184 6,203,184	0 684,895 684,895	0 26 26	0 705,334 705,334	0 796,996 796,996	0 498,884 498,884
aterials & Supplies Stores Expense Undistributed DISTRPLT Truck Stock Malans Stock DISTRPLT	PLT 205,330 PLT 140,504	124,686 4 85,321 25,806	11,287 7,723 3,974	000	14,184 9,706 3,437	17,682 12,100 4,054	12,606 8,626 1,191
	r		11,552	) O (	14,518	18,098	12,902
Mat Management, System to Stock District Appliances & Parts PLT386	7,7	-	564	00	3,349	6,810	5,329
Other Inventory Charges DISTRPLT Total Materials & Supplies	PLT 34,740 3,408,069	21,096 2,065,294	1,910 186,491	0 /	2,400 235,452	2,992 295,926	2,133 209,737
Total Additions to Net Plant	13,367,083	8,268,479	871,385	33	940,786	1,092,922	708,621
DEDUCTIONS TO NET PLANT Deferred Taxes							
Intangible Related INTPLT Production Related PRODPIT	F 5,898,382	3,593,639	336,533	27 %	409,798	520,435 87,725	333,897 68,644
tribution Related		44	4,039,934	151	5,077,129	6,329,293	4,512,084
		Ν.	230,102	· 5	268,868	339,048	730 373)
Communications Equip Metscan Adj PLT397U ferrad Taxes	// (537,412) 83.385.620	50.598.448	4,583,147	(5)	5,761,591	7,229,067	5,090,152
Unamortized Pre-1971 ITC PLANT			598	0	752	943	999
Customer Contributions Customer Deposits	03 11,088	3 7,703	1,165	0	876	503	253
Customer Deposits - Firm Customers CUSTDEP			159	0	787,831	643,771	150,645
Customer Deposits - Marketers CUSTTR	915,350	10,355	1,392	00	219,031	291,350	96,613 247 259
Total Customer Deposits Staimed Checks REVCLAIM		•	17,214	> ~	17,885	20,302	13,020
Total Deductions to Net Plant	86,753,189	50,809,734	4,603,675	172	6,787,965	8,185,936	5,351,349
	386,254,124	1 228,590,507	17,817,826	948	25,270,489	36,540,215	26,258,360

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
	11:19 AM	
	30-Jun-05	

LOW WINTER LRG HI ANNUAL G-53 & T-53	0 358,756 358,756	9,065 6,203 300 9,278 120,062 4,412 1,534 150,854	246,266 56,829 3,244,841 147,325 (22,412) 3,672,849 3,672,849 16,653 16,653 16,653 16,854,575
LOW WINTER HIGH ANNUAL G-52 & T-52	0 214,707 214,707	5,323 3,642 650 5,448 70,495 2,219 901	303,385 143,788 28,583 1,905,221 89,796 (13,085) 2,154,304 282 114 73,895 44,556 118,452 5,600 2,278,752 11,106,633
LOW WINTER MED ANNUAL G-51 & T-51	259,266 259,266	5,500 3,763 1,737 5,629 72,840 1,906 931	351,572 167,787 24,555 1,968,608 112,797 (15,303) 2,258,444 205 204 204 205 204 205 205 205 205 205 205 205 205 205 205
LOW WINTER LOW ANNUAL G-50 & T-50	0 146,113 146,113	2,704 1,850 1,100 2,767 35,810 473 45,162	83,917 6,096 967,802 58,277 (7,656) 1,108,436 1,48,410 95,623 244,033 3,717 1,356,534 4,722,538
HIGH WINTER LRG HI ANNUAL G-43 & T-43	0 90,853 90,853	2,293 1,569 85 2,347 30,364 1,117 388 38,162	129,015 62,309 14,383 820,643 37,346 (5,671) 929,010 1,21 13 83,686 2,830 86,516 2,295 1,017,956 4,945,346
ALLOC		DISTRPLT DISTRPLT PLT3813 DISTRPLT DISTRPLT PLT386 DISTRPLT	INTPLT PRODPLT DISTRPLT GENPLT PLT3970 PLANT PLT3803 CUSTDEP CUSTTR
DELIVERY COMPONENTS  DEVELOPMENT OF RATE BASE CONT-7	ADDITIONS TO NET PLANT Cash Working Capital Purchased Gas Other O&M Total Cash Working Capital	Materials & Supplies Stores Expense Undistributed Truck Stock Meters Stock Inventory-Imprest Mat Management System IC Stock Appliances & Parts Other Inventory Charges Total Materials & Supplies	<b>DE</b>
	# C1 C0	4 5 6 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 14 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15

HIGH WINTER HIGH WINTER MED ANNUAL HIGH ANNUAL G-42 & T-42				14 461 979	<u> </u>			11,991,843 7,093,023			_	58,971	25,32				0 (		52		836,078 654,220	942,232 737,285			21,899 17,136		98,371 71,641		1,945,716 1,494,897	13,937,559 8,587,921
HIGH WINTER HIGH W LOW ANNUAL MED A G-40 & T-40 G-41 8				0.687.924	- **	25,227		9,947,841 11		e e e e e e e e e e e e e e e e e e e	/9,248	0	0	0	0	Φ!	o <sup>,</sup>	0	79,248	2,093	411,136	463,337		1,16/	10,769	60,169	72,105	6,492	1,034,410	10,982,251
OUTDOOR LIGHTING				720	10	7	w	394		•	0	0	0	0	0	0	0	0	0	0	27	30	,	0	<del>-</del>	7	೫	0	59	453
RESIDENTIAL NON-HEATING R-1 & R-2				000	4,703,311	4,248	14,271	4,827,390		•	0	0	0	0	0	0	0	0	0	1,226	69,223	78,012	1	927	1,813	47,877	50,618	5,166	204,245	5,031,635
RESIDENTIAL HEATING R-3 & R-4				000	1,322,750	221,542	744,340	94,869,536		•	0	0	0	0	0	0	0	0	0	20,434	3,610,532	4,068,950		10,248	94,569	528,914	633,731	27,066	8,390,713	103,260,249
TOTAL				500	139,737,043	418,748	1,406,917	144,062,908			79,248	58,971	25,329	3,342	15,876	16,305	8,954	7,019	215,044	27,736	6,824,456	7,690,936		16,890	178,750	871,002	1,066,642	93,975	15,918,789	159,981,697
ALLOC					DISTR	DISTR	DISTR				C487R40	C487R41	C487R42	C487R43	C487R50	C487T51	C487R52	C487R53		CUST487	_	CUST882		PLANT	DEMLNG	DISTRPLT		DISTRPLT		
DELIVERY COMPONENTS ODE:DATING DEVENIES.8	OF FIRST LING REVENUES-0	REVENUES	GAS OPERATING REVENUES	SALES REVENUES	Firm Sales of Gas Special Contracts	Special Contracts Adjustment	Special Contracts - Other	Total Sales of Gas	OTHER OPERATING REVENUES	487-Late Payment Charges	High Wint Low Ann Rate G40 & T40	High Wint Med Ann Rate G41 & T41	High Wint High Ann Rate G42 & T42	High Wint Lrg Ann Rate G43 & T43	Low Wint Low Ann Rate G50 & T50	Low Wint Med Ann Rate G51 & T51	Low Wint High Ann Rate G52 & T52	Low Wint Lrg Ann Rate G53 & T53	Total Account 487	487-Return Check Charges	488-Rental Revenues-W/H & Conv Burn	882-Revenue Guardian Care & C/S	493-Rent from Gas Property	Rent from Gas Property	LNG Tank Lease Revenue	I/C Rents	Total Account 493	903-Cust R&C, Shutoff & Turn-Off	Total Other Operating Revenues	Total Gas Operating Revenues
				•	- 2	ಣ	4	ις			9	7	8	6	10	<del>-</del>	12	13	14	15	16	17		40	19	20	21	22	23	24

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# BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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	DELIVERY COMPONENTS		HIGH WINTER	LOW WINTER	LOW WINTER	LOW WINTER	LOW WINTER	
	OPERATING REVENUES-8	ALLOC	LRG HI ANNUAL G-43 & T-43	G-50 & T-50	MED ANNOAL G-51 & T-51	HIGH ANNUAL G-52 & T-52	LKG FII ANNUAL G-53 & T-53	
	REVENUES							
	GAS OPERATING REVENUES							
∠ 0. 6. 4 €	SALES REVENUES Firm Sales of Gas Special Contracts Special Contracts Adjustment Special Contracts - Other Total Sales of Gas	DISTR DISTR DISTR	925,505 50,220 8,411 28,260 1,012,397	1,770,936 21,286 3,565 11,978 1,807,765	3,164,436 85,737 14,360 48,246 3,312,780	3,174,364 99,803 16,716 56,161 3,347,044	5,509,578 198,426 33,234 111,659 5,852,896	
	OTHER OPERATING REVENUES 487-Late Payment Charges							
9	High Wint Low Ann Rate G40 & T40	C487R40	0	0	0	0	0	
7	High Wint Med Ann Rate G41 & T41	C487R41	0	0	0	0	0	
æ	High Wint High Ann Rate G42 & T42	C487R42	0	0	0	0	0	
න	High Wint Lrg Ann Rate G43 & T43	C487R43	3,342	0	0	0	0	
10	Low Wint Low Ann Rate G50 & T50	C487R50	0	15,876	0	0	0	
4 i		C487T51	0	00	16,305	0 054	<b>~</b>	
72		C48/R52	0 (			406,0 400,0	7 019	
5 4	Low Wint Lrg Ann Kate G53 & 153 Total Account 487	C48/R53	3.342	15.876	16,305	8,954	7,019	
15	487-F	CUST487	111	382	562	211	93	
16		CUST488	137,079	58,101	234,026	272,418	541,616	
17	882-Revenue Guardian Care & C/S	CUST882	154,484	65,478	263,739	307,006	610,384	
	49	1		200	7.11	1.0	37.5	
2		FLAN:	000	#27 #27	100	1 4 2 5	7 7 7 8 8	
<u></u>		DEMING	3,090	22C,1	0,130	001,7	14,100	
2	2	DISTRPLT	9,725	11,469	73,330	6/6/27	38,455	
7			13,504	13,215	29,917	30,151	53,386	
22	903-Cust R&C, Shutoff & Turn-Off	DISTRPLT	1,049	1,237	2,517	2,436	4,149	
23			309,570	154,289	547,066	621,176	1,216,647	
24	Total Gas Operating Revenues		1,321,966	1,962,055	3,859,846	3,968,220	7,069,543	

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GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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BAY STATE GAS COMPANY

HIGH WINTER HIGH ANNUAL G-42 & T-42 BRK7.xls COST OF SERVICE 22,592 32,043 80,561 263 388 9,194 9,844 402 421 3,764 4,587 14,414 HIGH WINTER MED ANNUAL G-41 & T-41 7,474 9,827 18,164 5,812 1,029 922 0 3,675 4,832 0 453 11,109 15,757 39,615 8,932 2,858 506 129 191 4,521 4,841 44,456 198 207 1,851 2,256 7,088 HIGH WINTER LOW ANNUAL G-40 & T-40 00000 -00000++\* 000000 00000 OUTDOOR LIGHTING 33 35 312 380 380 1,193 1,870 2,653 6,670 ,504 481 85 22 32 761 815 7,485 RESIDENTIAL NON-HEATING R-1 & R-2 1,135 1,673 39,703 42,512 390,406 1,819 16,255 19,810 62,247 3,980 32,275 42,437 78,440 25,100 4,442 97,560 138,373 347,894 3,031 RESIDENTIAL HEATING R-3 & R-4 184,402 261,547 657,574 2,146 3,163 75,045 80,354 737,928 61,004 80,213 3,439 30,724 37,443 117,656 47,443 8,396 7,523 3,281 COMPANY TOTAL DEMLNG EREMAIN EREMAIN ALLOC TLABPM DEMLPG DEMLPG DEMLNG EREMAIN EREMAIN EREMAIN DEMLNG DEMLNG LABPO DEMLPG DEMLPG DEMLPG DEMLNG DEMLNG **LABLM** TLABLO JOUEFIED PROPANE GAS PRODUCTION LIQUEFIED NATURAL GAS PRODUCTION **OPERATION & MAINTENANCE EXP-9** 782-Maintenance of Production Equip 742-Maintenance of Production Equip Total Liquefied Propane Gas Prod Exp OPERATION & MAINTENANCE EXP 740-Supervision 741-Maintenance of Struct & Improv 781-Maintenance of Struct & Improv Total Liquefied Natural Gas Prod Exp 735-Miscellaneous Production Exp Total Operation Expense 763-Fuel for Vaporization Expense 775-Miscellaneous Production Exp 723-Fuel for LPG Gas Process Total Maintenance Expense Total Maintenance Expense 728-Liquefied Petroleum Gas DELIVERY COMPONENTS 754-Liquefaction Expense 757-Vaporization Expense 758-Liquefied Natural Gas 759-Handling Expense Total Operation Expense 717-LPG Gas Expenses 768-LNG Raw Materials 719-Handling Expense 777-Lease Expense Operation Expense Operation Expense 780-Supervision 750-Supervision 710-Supervision Maintenance Maintenance 8 6 7 7 2 23 25 25 27

314 330 2,945 3,589 11,279

14,213 4,548 805

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1)

Page 17 of 322

Page 9-1

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206 303 7,194 7,703

17,678 25,073 63,038

11:19 AM

30-Jun-05

LOW WINTER LRG HI ANNUAL G-53 & T-53	1,059 11 455 0 0 4,842 6,366	260 273 2,438 2,972 9,338	11,767 3,765 666 0 597 0 14,635 20,757 52,188 52,188 5,956 6,377 58,565
LOW WINTER HIGH ANNUAL G-52 & T-52	533 229 0 0,435 3,202	137 137 1,226 1,495 4,697	5,918 1,894 335 0 300 7,361 10,440 26,249 2,996 3,208 3,208
LOW WINTER MED ANNUAL G-51 & T-51	458 5 196 0 0 2,092 2,751	112 118 1,054 1,284 4,035	5,084 1,627 288 288 258 0 0 0 0 0 0 22,550 22,550 2,573 2,573 2,573 2,573 2,573 2,573
LOW WINTER LOW ANNUAL G-50 & T-50	114 1 49 0 0 519 683	28 29 262 319 1,002	1,262 404 71 0 64 64 1,570 2,727 5,598 639 639 639 684 6,282
HIGH WINTER LRG HI ANNUAL G-43 & T-43	268 3 115 0 0 1,225 1,611	66 69 617 752 2,363	2,978 953 169 0 151 0 3,704 5,254 13,208 1,507 1,614 14,822
ALLOC	TLABPO TLABPO DEMLPG DEMLPG EREMAIN EREMAIN DEMLPG	TLABPM DEMLPG DEMLPG	TLABLO DEMLNG DEMLNG EREMAIN DEMLNG EREMAIN EREMAIN EREMAIN TLABLM DEMLNG DEMLNG DEMLNG DEMLNG
DELIVERY COMPONENTS OPERATION & MAINTENANCE EXP-9	OPERATION & MAINTENANCE EXP LIQUEFIED PROPANE GAS PRODUCTION Operation Expense 1 710-Supervision 2 717-LPG Gas Expenses 3 719-Handling Expense 4 723-Fuel for LPG Gas Process 5 728-Liquefied Petroleum Gas 6 735-Miscelleneous Production Exp 7 Total Operation Expense	Maintenance 8 740-Supervision 9 741-Maintenance of Struct & Improv 10 742-Maintenance of Production Equip 11 Total Maintenance Expense 12 Total Liquefied Propane Gas Prod Exp	LIQUEFIED NATURAL GAS PRODUCTION Operation Expense 13 750-Supervision 14 754-Liquefaction Expense 15 757-Vaporization Expense 16 758-Liquefied Natural Gas 17 754-Handling Expense 18 763-Fuel for Vaporization Expense 19 763-Fuel for Vaporization Expense 19 763-Fuel for Vaporization Expense 19 763-Fuel for Vaporization Expense 10 775-Miscellaneous Production Exp 21 777-Lease Expense 22 775-Wiscellaneous Production Exp 23 775-Wiscellaneous Production Exp 24 777-Lasse Expense 25 780-Supervision 26 781-Maintenance of Struct & Improv 27 782-Maintenance of Production Equip 28 70-Indi Maintenance Expense 29 70-Indi Maintenance Expense 20 70-Indi Maintenance Expense 20 70-Indi Maintenance Expense 21 70-Indi Maintenance Expense 22 70-Indi Liquefied Natural Gas Prod Exp

OF SERVICE
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Page 10-1

6/30/2005 11:41 AM

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 19 of 322

HIGH WINTER	HIGH ANNUAL G-42 & T-42		000	000	0	82,020
HIGH WINTER	MED ANNUAL G-41 & T-41		000		0	104,819
HIGH WINTER	LOW ANNUAL G-40 & T-40		000		0	51,544
	OUTDOOR LIGHTING		000	000	0	ಣ
RESIDENTIAL	NON-HEATING R-1 & R-2		000	000	0	8,679
ᆔ	HEATING R-3 & R-4		000	000	0	452,653
	TOTAL COMPANY		000	000	0	855,584
	ALLOC		DBASE DREMAIN	EBASE EREMAIN		
DELIVERY COMPONENTS	OPERATION & MAINT EXP CONT-10	OTHER GAS SUPPLY EXPENSES PURCHASED GAS SUPPLY	Gas Supply Demand Charges 1 Base Demand Charges 2 Remaining Demand Charges 3 Total Demand Gas Costs	Gas Supply Commodity Charges 4 Base Commodity Charges 5 Remaining Commodity Charges 6 Total Commodity Gas Costs	7 Total Gas Supply Expense	8 Total Production Expense
				4 47 40		~

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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LOW WINTER LRG HI ANNUAL G-53 & T-53

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 21 of 322

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

Attachment AG-22-44

TLABDO		TOTAL	RESIDENTIAL HEATING	RESIDENTIAL NON-HEATING	OUTDOOR	HIGH WINTER LOW ANNUAL	HIGH WINTER MED ANNUAL	HIGH WINTER HIGH ANNUAL
TLABDO   T07,572   408,612   36,648   1   49,589   T3,541		COMPANY	R-3 & R-4	R-1 & R-2	LIGHTING	G-40 & T-40	G-41 & T-41	G-42 & T-42
TLABDO   T07,572   406,612   36,648   1   49,599   T3,541   0   0   0   0   0   0   0   0   0	ON EXP							
DISTR		707 570	408 642	36 648	#	40 500	73 541	44 293
DISTR         143,882         76,122         1,459         1         8,668         17,627           PLT389         405,485         24,428         49,677         42,428         49,677           PLT389         405,485         23,06,379         196,617         8         255,420         308,431           PLT3819         5,923,626         3,434,111         528,895         0         457,429         538,449           PLT3817         5,923,626         3,133,941         60,086         23         256,866         725,715           EXP8519         56,223,626         3,133,941         60,086         23         356,866         725,715           EXP8519         56,223,626         3,133,941         60,086         23         356,866         725,715           EXP8519         56,223,626         3,133,941         60,086         23         356,866         725,715           EXP8519         56,223,626         3,133,941         60,0086         23         37         1,196,462         1,782,009           PLT366         41,025         2,170         857,384         15         1,196,462         1,782,009           PLT367         3,789,633         2,049,67         38,440         15 <td< td=""><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></td<>		0	0	0	0	0	0	0
PLT369         405,485         214,525         4,113         2         24,428         49,677           PLT36780         3,764,532         2,306,379         196,617         8         255,420         308,431           PLT36780         3,764,532         2,306,379         196,617         8         255,420         308,431           CUSTR37         5,923,656         3,133,941         60,086         23         356,866         725,715           EXP8519         5,923,657         35,260         28,941         1         40,341         60,024           EXP8519         60,576         32,947         625         0         35,10         7,544           DISTR         61,576         32,577         625         0         3,110         7,544           FLYSE         7,7220,800         9,941,527         857,384         37         1,196,462         1,782,009         1,7           PLT366         4,1025         2,534         196         0         2,472         5,026         1,7           PLT367         3,780,409         12,472         38,440         15         2,472         5,026         1,7           PLT368         1,224,728         1,224,728         36,494         3		143,882	76,122	1,459	<b>4</b>	8,668	17,627	13,793
PLT36780         3,764,532         2,306,379         196,617         8         255,420         308,431         508,431         508,431         508,431         508,431         508,431         508,431         508,431         508,449         508,449         508,449         508,449         508,449         508,449         508,449         508,449         508,449         508,449         508,449         508,449         508,449         508,449         508,449         508,449         509,441         60,024         60,024         60,024         60,024         60,024         60,024         60,024         60,024         60,024         60,024         60,024         60,024         60,024         7,544         60,024         7,544         60,024         7,544         7,544         60,024         7,544         7,544         60,024         7,544         7,544         7,544         7,544         7,544         7,544         7,544         7,544         7,544         7,544         7,544         7,520,800         9,941,527         857,384         3,710         7,784         9,045         9,045         9,045         9,045         9,045         9,045         9,045         9,045         9,045         9,047         9,047         9,047         9,047         9,047         9,0	Exp	405,485	214,525	4,113	2	24,428	49,677	38,871
PLT3813         5,633,560         3,434,111         528,895         0         457,429         539,449           CUST879         5,923,626         3,133,941         60,086         23         356,866         725,715         1           EXP8519         5,923,626         3,133,941         60,086         23         356,866         725,715         1           EXP8519         5,80,567         385,260         28,941         1         40,341         60,024         60,244         60,024         75,44         60,024         75,44         60,024         75,44         17,744         75,44         17,740         75,44         17,740         75,44         17,740         75,44         17,740         75,44         17,741         75,44         17,741         75,44         17,741         75,44         17,741         75,44         17,771         75,44         17,771         75,44         17,771         75,44         17,771         75,44         17,771         75,44         17,771         75,44         17,771         75,44         17,771         75,44         17,771         75,44         17,771         75,44         17,771         75,44         75,14         75,14         75,14         75,14         75,14         75,14 <th< td=""><td>_</td><td>3,764,532</td><td>2,306,379</td><td>196,617</td><td>æ</td><td>255,420</td><td>308,431</td><td>240,999</td></th<>	_	3,764,532	2,306,379	196,617	æ	255,420	308,431	240,999
CUSTR9         5,923,626         3,133,941         60,086         23	_	5,633,560	3,434,111	528,895	0	457,429	539,449	158,439
EXP8519         580.567         335,260         28,941         1         40,341         60,024           DISTR         61,576         32,577         625         0         3,710         7,544           TLABDM         4,267         2,534         196         0         2,86         393           PLT366         41,025         21,705         416         0         2,472         5,026           PLT367         3,789,693         2,004,967         38,440         15         2,472         5,026           PLT367         3,789,693         2,004,967         38,440         15         2,28,308         464,283         0           PLT369         2,29,637         121,491         2,329         1         13,834         28,133           PLT3810         4,687,229         1,224,728         46,963         0         0         0         0           PLT3813         46,322         265,974         40,963         0         35,428         41,781           PLT387         403,627         213,542         4,094         2,409         24,316         49,449           PLT387         436,480         177         178,110         54         178,299         11,449	_	5,923,626	3,133,941	980'09	23	356,866	725,715	567,863
DISTR         61,576         32,577         625         0         3,710         7,544         1,782,009         1,7		580,567	335,260	28,941	τ	40,341	60,024	37,311
TLABDM         4.267         2.534         196         0         2.286         393         1,782,009         1,782,	DISTR	61,576	32,577	625	0	3,710	7,544	5,903
TLABDM 4,267 2,534 196 0 2,472 5,026 393   PLT366 41,025 2,004,967 38,440 15 2,28,308 464,283 (2,026)   PLT367 3,789,693 2,004,967 38,440 15 2,28,308 464,283 (3,026)   PLT368 229,637 121,491 2,329 1 13,834 28,133   PLT380 1,687,229 1,224,728 184,286 0 131,854 45,509   PLT3813 436,322 265,974 40,963 0 35,428 41,781   PLT3817 403,627 2,13,542 4,094 2 24,316 49,449   PLT387 403,627 2,13,542 4,094 2 270,725 17,728 110 54 1,632,961 2,416,582 11;		17,220,800	9,941,527	857,384	37	1,196,462	1,782,009	1,107,472
TLABDM         4,267         2,534         196         0         286         393           PLT386         41,025         21,705         416         0         2,472         5,026           PLT387         3,789,683         2,004,967         38,440         15         228,308         464,283         5           PLT388         229,637         121,491         2,329         1         13,834         28,133           PLT380         1,687,229         1,224,728         184,286         0         13,854         45,509           PLT3813         436,322         265,974         40,963         0         24,316         49,449           PLT387         403,627         213,542         4,094         2         24,316         49,449           PLT387         403,627         270,725         17         436,499         634,573         436,499         634,573								
PLT366         41,025         21,705         416         0         2,472         5,026           PLT367         3,789,693         2,004,967         38,440         15         228,308         464,283         5           PLT368         229,637         121,491         2,329         1         13,834         28,133           PLT380         1,687,229         1,224,728         184,286         0         13,834         45,509           PLT3813         436,322         265,974         40,963         0         35,428         41,781           PLT387         403,627         213,542         4,094         2         24,316         49,449           PLT387         403,627         270,725         17         436,499         634,573         436,499           A38,456         17,8410         54         1,632,961         24,665         11,632,961         24,665	TLABDM	4,267	2,534	196	0	286	393	292
PLT367         3,789,693         2,004,967         38,440         15         228,308         464,283         3           0	886-Maintenance of Struct & Improv PLT366	41,025	21,705	416	0	2,472	5,026	3,933
DELT368 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		3,789,693	2,004,967	38,440	15	228,308	464,283	363,296
PLT369 229,637 121,491 2,329 1 13,834 28,133	888-Maint of Compressor Station Equip PLT368	0	0	0	0	0	0	0
PLT380 1,687,229 1,224,728 184,286 0 131,854 45,509 PLT3813 436,322 265,974 40,963 0 35,428 41,781 PLT387 403,627 213,542 4,094 2 24,316 49,449 PLT387 6,591,800 3,854,940 270,725 17 436,499 634,573 4 32,516 436,516 4 32,516 4 32,516 4 32,516 4 32,516 4 32,516 4 32,516 4 32,516 4 32,516 4 32,516 4 32,516 4 32,516 4 32,516 4 32,516 4 32,516 4 32,		229,637	121,491	2,329	•	13,834	28,133	22,014
PLT3813 436,322 265,974 40,963 0 35,428 41,781 PLT387 403,627 213,542 4,094 2 24,316 49,449 PLT387 6,591,800 3,854,940 270,725 17 436,499 634,573 4		1,687,229	1,224,728	184,286	0	131,854	45,509	35,247
PLT387 403,627 213,542 4,094 2 24,316 49,449 6,591,800 3,854,940 270,725 17 436,499 634,573 4	se Redul	436,322	265,974	40,963	0	35,428	41,781	12,271
6.591,800 3,854,940 270,725 17 436,499 634,573 4 23,573 4 1,632,981 2,416,582 1.5		403,627	213,542	4,094	7	24,316	49,449	38,693
23 812 601 13 796 468 1128 110 54 1.632 961 2.416.582		6,591,800	3,854,940	270,725	17	436,499	634,573	475,746
	Total Transmission and Distribution Exp	23,812,600	13,796,468	1,128,110	54	1,632,961	2,416,582	1,583,218

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 22 of 322

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
	11:19 AM	
	30-Jun-05 11:19 AM	

Attachment AG-22-44

LOW WINTER	G-53 & T-53		200	0,100	11,419	32,181	178,106	39,911	470,123	26,767	4,887	794,699		220	3,256	300,765	0	18,225	6,586	3,091	32,033	364,176	1,158,876	
LOW WINTER HIGH ANNI IAI	G-52 & T-52		A C A	19,400	5,743	16,186	62,866	86,519	236,459	16,270	2,458	482,973		122	1,638	151,277	0	9,167	14,178	6,701	16,112	199,194	682,167	
LOW WINTER MED ANNIAL	G-51 & T-51		0.00	24,738	4,934	13,905	90,410	231,141	203,134	19,882	2,112	590,276		118	1,407	129,957	0	7,875	17,041	17,902	13,841	188,140	778,415	
LOW WINTER	G-50 & T-50		200	085,11	1,225	3,452	43,363	146,403	50,432	8,958	524	265,737		51	349	32,264	0	1,955	26,302	11,339	3,436	75,696	341,433	
			c	o C	· 0	5	ආ	8	·.	_	7	3		9	4	2	0	e5	on.	2	7	· m	80	
HIGH WINTER	G-43 & T-43		1	9/6/	2,890	8,145	44,919	11,263	118,985	6,81	1,237	202,225		56	824	76,122		4,613	1,499	872	8,10	92,093	294,318	
	ALLOC			ILABDO	DISTR	PLT369	PLT36780	PLT3813	CUST879	EXP8519	DISTR			TLABDM	PLT366	PLT367	PLT368	PLT369	PLT380	PLT3813	PLT387	· ) ) •		
DELIVERY COMPONENTS	OPERATION & MAINT EXP CONT-11	TRANSMISSION & DISTRIBUTION EXP	Operation Expense	850-Operation Supervision & Engineer	852-Communication System Exp	857-Measuring & Regulating Stat Exp	874-Mains and Services Exp	878-Meter & House Regulator Exp	879-Customer Installations Exp	880-Other Expenses	881-Rents	Total Operation Expense	Maintenance	885-Supervision	886-Maintenance of Struct & Improv	887-Maintenance of Mains	888-Maint of Compressor Station Equip	889-Maint of Meas & Reg Station Equip	892-Maintenance of Services	893-Maint of Meters and House Redui	894-Maintenance of Other Foreinment	Total Maintenance Expense	Total Transmission and Distribution Exp	
		F		<del>د.</del> د	4 (1)	4	. rb	· (C	·  ~	. 00	σ.	10	~	<del>;</del>	12	13	14	5	5	17	- œ	<u>\$</u>	. 02	

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

HIGH WINTER HIGH ANNUAL G-42 & T-42	3,446 3,041	5,488 24,249 82,741 15,700 128,327	0 0 0 0 0 0 0 10,880	0 0 0 0 2,327 618 8,315 31,255 23,605 77,000	Bay State Gas Company  821.8.  91.8.  92.8.  93.8.  94.8.  95.8.  96.8.  96.8.  97.8.  98.8.
HIGH WINTER MED ANNUAL G-41 & T-41	7,790	41,493 90,209 116,064 34,583 1,132 283,482	63,445	0 0 0 13,570 3,606 10,628 39,943 30,166 161,357 464,190	4,301 10,090 3,964 15,477 1,144 20,584 605 35,581
HIGH WINTER LOW ANNUAL G-40 & T-40	16,527 41,749	147,828 262,113 93,102 70,215 4,034 577,292	284,753	0 0 0 0 0 60,906 16,186 5,225 19,641 14,834 401,546 1,037,114	3,683 8,795 3,455 7,611 7,611 7611 262 403 24,509
OUTDOOR LIGHTING	00	0 - 8 0 0 4	000000	0000000++%/	00 000-0-
RESIDENTIAL NON-HEATING R-1 & R-2	21,834 81,154	278,340 278,140 74,083 88,014 7,595 726,172	594,698 0 0 0	0 0 0 0 127,201 33,803 880 3,307 2,498 762,387 1,591,548	4.292 10.460 4.109 1.281 3.15 20.551
RESIDENTIAL HEATING R-3 & R-4	160,538 540,719	1,968,879 1,919,813 818,413 657,021 53,727	1,886,206	0 0 0 0 399,164 106,077 45,889 172,488 130,271 2,720,096 8,833,207	42,759 102,717 40,349 66,834 4,938 112,122 4,240 261,838
TOTAL	220,334 695,743	2,489,385 2,684,835 1,347,741 910,424 67,947 7,550,832	1,866,206 594,698 0 284,753 63,445 10,880	206 62.395 23.025 4.798 622.998 165.561 86,737 326,029 246.232 4,360,247	66,710 159,642 62,710 126,327 9,334 198,371 7,065 431,788
ALLOC	TLABCA CUST902	CUST903 CUST903C DISTRPLT EXP903T CUST903	C904R3 C904R1 C904OL C904R40 C904R41	C904R43 C904R50 C904T51 C904R52 C904R53 EXP904S EXP904S CUST882 PLT386 EXP904O	TLABSA CUST912 CUST913 EXP879 PLT386 EXP9123
DELIVERY COMPONENTS OPERATION & MAINT EXP CONT-12	CUSTOMER ACCOUNTS EXPENSES 1 901-Supervision 2 902-Meter Reading Expenses	903-Cust Records & Collection Exp 3 Cust Billing & Payment Proc Exp 4 Collections Expense 5 Service Customer Equipment 6 Call Center Expenses 7 Postage Adjustment 8 Total Arrount 903	06		SALES EXPENSES 29 91-Supervision 29 913-Advertising Expense 30 Advertising Expense 31 Advertising Gardian Care 32 Advertising Water Heating Program 33 Otal Account 913 39 16-Miscellaneous Sales Exp 34 Total Sales Expenses

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- 1 년 -	G-53 & T-53								75 10,241		83,629						0						2							28 142,586		73 3,707				~		~~	22 454	2.
LOW WINTER HIGH ANNUAL	G-52 & T-52		1,456	1,625		2,207	9,964	34,937	6,575	9	53,744											4,798		1,026	273	3,462	13,014	9,829	32,403	89,228		1,773				5		7,064	222	13,255
LOW WINTER MED ANNUAL	G-51 & T-51		2,680	5,255		15,560	31,988	36,100	11,676	425	95,748		0	0	0	0	0	0	0	0	23,025	0	0	4,925	1,309	2,974	11,180	8,444	51,857	155,541		1,666	3,954		1,553	4,332	320	6,205	200	12.026
LOW WINTER LOW ANNUAL	G-50 & T-50		3,271	8,737		29,467	51,744	17,747	13,813	804	113,575		0	0	0	0	0	0	0	62,395	0	0	0	13,346	3,547	738	2,776	2,096	84,897	210,480		744	1,789		703	1,076	79	1,858	72	4,463
HIGH WINTER LRG HI ANNUAL	G-43 & T-43		562	375		134	3,335	15,049	2,585	4	21,106		0	0	0	0	0	0	206	0	0	0	0	44	12	1,742	6,549	4,946	13,499	35,542		657	1,536		603	2,537	187	3,328	96	5.617
	ALLOC		TLABCA	CUST902		CUST903	CUST903C	DISTRPLT	EXP903T	CUST903			C904R3	C904R1	C9040L	C904R40	C904R41	C904R42	C904R43	C904R50	C904T51	C904R52	C904R53	EXP904S	EXP904S	CUST882	PLT386	EXP9040				TLABSA	CUST912		CUST913	EXP879	PLT386		FXD9123	
DELIVERY COMPONENTS	OPERATION & MAINT EXP CONT-12	CUSTOMER ACCOUNTS EXPENSES	901-Supervision	902-Meter Reading Expenses	903-Cust Records & Collection Exp	Cust Billing & Payment Proc Exp	Collections Expense	Service Customer Equipment	Call Center Expenses	Postage Adjustment	Total Account 903	904-Uncollectible Accounts	Resid Heating Rate R-3 & R-4	Resid Non-Heating Rate R-1 & R-2	Outdoor Lighting	High Wint Low Ann Rate G40 & T40	High Wint Med Ann Rate G41 & T41	High Wint High Ann Rate G42 & T42	High Wint Lrg Ann Rate G43 & T43	Low Wint Low Ann Rate G50 & T50	Low Wint Med Ann Rate G51 & T51	Low Wint High Ann Rate G52 & T52	Low Wint Lrg Ann Rate G53 & T53	Adjustment Bad Debt Gas Sales	Adj Uncollectible Prop Rate Increase	Bad Debt Expense - Cust Service	Bad Debt Expense - Rental	Adjust Bad Debt Other Revenues	Total Account 904	Total Customer Accounts Expenses	SALES EXPENSES	911-Supervision	912-Demonstrating & Selling Exp	913-Advertising Expense	Advertising Expense	Advertising Guardian Care			916.	
			۳	- 6	1	m	4	. rc	) (C	· 1~	00		O	10	<del>-</del>	7	5	14	15	16	17	18	19	20	21	22	23	24	25	26		27	28		29	30	33	32	7,0	3

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# BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

HIGH WINTER HIGH ANNUAL G-42 & T-42	81,670 10,484) 182,883 111,661 11,738 11,611 11,738 11,611 11,738 11,611 11,611 11,738 11,611 11,738 11,611 11,611 11,738 11,611 11,	oany 5₹2 4(1) 322
HIGH WINTER HIC MED ANNUAL HIC G-41 & T-41 G	127,350 312,451 (27,263) 285,187 (278,236) 216,637 180,610 24,414 63,509 196,051 24,032 221,860 6,132 221,860 6,132 221,860 6,132 221,860 6,132 23,929 27,107 40,723 23,132 23,	5,837 211,802
HIGH WINTER H LOW ANNUAL N G-40 & T-40	275.246 (245,105) 251,229 (245,105) 172,674 158,758 86,594 49,995 172,707 19,155 94,935 42,906 18,442 4,891 14,309 21,206 15,707 119,423 15,707 15,707 15,709 23,879 35,874 18,210 26,351 115,666 292,281 86,760 40,519 0 9,596 48,637 43,032 43,032 43,032 42,006 16,707 17,009 16,710 17,009 17	5,142 5,142 186,582
OUTDOOR		) ()
RESIDENTIAL NON-HEATING R-1 & R-2	264,923 (23,116) 241,923 (23,116) 241,007 (235,913) 137,216 152,962 173,016 41,084 166,230 15,221 178,750 34,095 167,426 34,095 167,426 34,095 167,73 20,411 19,757 20,289 22,984 34,528 14,964 4,437 111,328 262,471 83,506 6,822 0 1,616 6,822 1,616 1,496 1,496 1,437 111,328 1,496 1,496 1,496 1,497 1,491 1,4	0,070 4,949 179,585
RESIDENTIAL HEATING R-3 & R-4	997,443 2,447,213 (213,536) 2,233,676 (2,179,229) 1,516,528 1,362,496 1,149,827 4,344,417 3,76,827 1,659,350 1,129,015 1,129,015 1,129,015 1,129,015 1,129,015 1,129,015 1,138,233 1,127,226 1,88,547 147,407 15,609 17,558,906	24,277 45,721 1,658,903
TOTAL COMPANY	1,598,344 3,921,516 (3,42,180) 3,579,336 (3,492,083) 2,499,540 2,207,549 1,465,284 7,19,521 2,460,609 2,77,276 (5,99,072 6621,087 2,684,935 7,0821 11,581 33,206 1,753,458 204,082 300,332 340,213 511,102 262,069 437,393 1,647,928 4,209,127 1,236,095 672,581 603,831 (7,997) (2,214,080) 602,954 603,831 (7,997) (2,214,080) 602,954 603,831	00,970 73,265 2,658,296
ALLOC	REVCLAIM REVCLAIM REVCLAIM REVCLAIM REVCLAIM BASIS:10 BAS	REVCLAIM
DELIVERY COMPONENTS  OPERATION & MAINT EXP CONT-13  ADMINISTRATIVE & GENERAL EXP	Operation Expense 920-Administrative & General Salaries 921-Office Supplies & Expenses Coffice Supplies & Coffice Services Nisource Basis 13 Coutside Services Nisource Basis 20 Coutside Services Nisource Basis 30 Coutside Services Control Coutside Services Employed BSG Nisource Retail Services Coutside Services Employed BSG Nisource PBOP & Pension Nisource Payroll & Benefits Adj Nisource PBOP & Pension Nisource PBOP & Pens	1 Corporate Insurance Premiums Adj 2 Self Insurance Adjustment 3 Total Account 925

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Bay State Gas Company
D.T.E. 05-27
Attachment AG-22-44(1)
Page 26 of 322

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 26 of 322	COST OF SERVICE
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DELIVERY COMPONENTS		HIGH WINTER	LOW WINTER	LOW WINTER	LOW WINTER	LOW WINTER
OPERATION & MAINT EXP CONT-13	ALLOC	LKG NI ANNOAL G-43 & T-43	G-50 & T-50	G-51 & T-51	G-52 & T-52	G-53 & T-53
ADMINISTRATIVE & GENERAL EXP						
Operation Expense 920-Administrative & General Salaries	REVCLAIM	14,394	23,315	41,623	35,130	57,252
921-Omice Supplies & Expenses Office Supplies & Expenses LDAC Unbilled Revenues Adj	REVCLAIM REVCLAIM	35,316 (3,082)	57,203	102,123	86,190 (7,521)	140,467 (12,257)
Total Account 921 922-Administrative Exp Transferred-Cr	REVCLAIM	32,234 (31,448)	52,271 (50,939)	93,212 (90,940)	(76,752)	(125,085)
923-Outside Services Employed Nisource Basis 1 - 50% Gross Ptt	BASIS1P	27,890	33,166	67,624	64,671	110,266
N Basis 1 - 50% O&M Ex Gas Costs	BASIS10M BASIS10	20,315	33,302	59,090	48,208	80,153
Outside Services Nisource Basis 10 Outside Services Nisource Basis 11	BASIS11	7,592	10,251	20,488	17,518	30,007
Outside Services Nisource Basis 13	REVCLAIM	22,159	35,893	64,078	54,081	88,138
Out Serv Basis 13 - Facilities Mgt	PLANT	3,094	3,679	7,502	1,1/4	12,232
Outside Services Nisource Basis 2	BASIS2	0,69	8,241	16,803	16,070	27,399
Outside Services Nisource Basis 20	BASIS20	26,723	37,486	70,900	62,484	106,095
Nisource Basis 7 - 50% Deprec Pit	BASIS7P	792	937	1,911	1,837	3,131
Nisource basis 7 - 50% Cow Outside Septices Nisource Basis 0	BASIS9	350	473	946	808	1,385
Outside Services Nisource Co 12	BASC012	14,691	24,040	40,903	34,752	58,227
Catalage Serving Source Direct Direct RSG Comminications	REVC! AIM	1.836	2,974	5,309	4,481	7,303
Regulatory External Affairs	REVCLAIM	2,721	4,407	7,868	6,641	10,822
Printing & Inserting	EXP903	574	3,090	2,605	1,462	2,275
Finance & Acct'g & HR	REVCLAIM	2,705	4,381 4 963	7,821	6,601	10,758
Regulatory	REVCLAIM REVCI AIM	5,004 4,603	7,455	13.310	11.233	18.307
Fleet Management	LABOR	2,765	3,734	7,462	6,381	10,929
Nisource Retail Services	EXP879	8,786	3,724	14,999	17,460	34,713
Oth Outside Servvice - Direct Billed	REVCLAIM	14,841	24,038	42,915	36,219	59,028
Outside Services Employed BSG	REVC! AIM	11,132	18,031	32,190	27,168	44,276
NIS Gas Dispatching & Control	DISTR	13,510	5,726	23,064	26,848	53,379
NIS Gas Acq & Dispat Costs - Sales	GASCOSTS	0	0 10	0 0	0	0
NIS Gas Acq & Dispat Costs - Trans	DISTR	3,199	1,356	5,462	6,358 15,350	12,641
Nisource Payroli & Benefits Adj	DENCLAIM	6,240 5 233	10, 108 8 656	14 995	12,230	19 927
Nisource Charitable Contr Adi	REVCLAIM	(72)	(117)	(208)	(176)	(286)
DSM Inplementation Expense Adj	REVCLAIM	(19,939)	(32,297)	(27,658)	(48,663)	(79,308)
Customer Choice Recoveries Adj	REVCLAIM	543	8/9	1,570	1,325	2,159
lotal Account 923 924-Property Insurance	PLANT	92,340 0	0	0	0	0
925-Injuries & Damages		92 400	26 420	020	84 904	89.470
Injuries & Damages Corporate Insurance Premiums Adj	REVCLAIM REVCLAIM	783	1,269	2,265	1,912	3,115
Self Insurance Adjustment	REVCLAIM	660	1,069	1,908 69 226	1,610	2,624
10tal Account 92.0		21.2/04	1		1	

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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HIGH WINTER HIGH ANNUAL G-42 & T-42	491,182 40,282 244,396 775,860	16,806 15,518 32,324 0	32,779 (6,890) 14,503 40,392	51,583 135,486 (82,096) 17,781 8,721 131,475 2,255,270	107,210 (63,108) 44,101 2,299,372 4,203,202	4,203,202	Bay State (6,100) (6,100) (6,100) (7,100) (1,1	e Gas Company — D.T.E. 05-27 eM AG-22-44(1) Rage 27 of 322
HIGH WINTER MED ANNUAL G-41 & T-41	767,109 62,910 393,469 1,223,489	26,206 24,197 50,403 0	51,114 (10,743) 22,614 62,984	80,434 461,298 (279,517) 22,724 29,694 314,632 3,620,602	176,538 (103,918) 72,620 3,693,222 6,714,394	6,714,394	92.571 35,015 (9,816) (34,478) 1,118 96,846	6,895,650
HIGH WINTER LOW ANNUAL G-40 & T-40	603,886 49,524 358,207 1,011,617	23,086 21,316 44,402 0	45,027 (9,464) 19,921 55,485	70,857 391,160 (237,019) 11,174 25,180 261,352 3,158,460	139,996 (82,408) 57,588 3,216,048 5,962,176	5,962,176	79,007 29,884 (8,377) (27,481) 985 79,384	6,115,577
OUTDOOR LIGHTING	17 10 29	for for 60 O	+ <u>©</u> + 0	2 0 0 1 3 152	4 (2) 1 153 218	218	2 (3) (0) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	222
RESIDENTIAL NON-HEATING R-1 & R-2	486,243 40,697 326,780 863,720	22,220 20,516 42,736 0	43,339 (9,109) 19,174 53,404	68,199 452,273 (274,049) 1,881 29,113 277,418 3,021,873	119,812 (70,526) 49,285 3,071,158 5,820,045	5,820,045	70,766 26,767 (7,504) (21,838) 948 67,266	5,956,449
RESIDENTIAL HEATING R-3 & R-4	5,295,494 434,281 3,194,839 8,924,615	205,256 189,519 394,776	400,337 (84,144) 177,121 493,314	629,987 2,936,603 (1,779,398) 98,130 189,033 2,074,355 28,548,820	1,209,643 (712,050) 497,593 29,046,413 52,396,578	52,396,578	696,751 263,543 (73,879) (241,358) 8,753 697,892	53,748,281
TOTAL	8,690,973 712,743 5,026,451 14,430,167	328,911 303,694 632,605 0	641,517 (134,837) 283,826 790,506	1,009,517 4,817,413 (2,919,051) 185,481 310,104 3,403,464 45,416,636	1,985,190 (1,168,571) 816,619 46,233,255 84,110,483	84,110,483	1,120,371 423,775 (118,797) (397,807) 14,026 1,134,353	86,286,405
ALLOC	LABOR LABOR PENSION	REVCLAIM REVCLAIM REVCLAIM	REVCLAIM REVCLAIM REVCLAIM	REVCLAIM PLT397M PLT397M PLT386 PLT397E	GENPLT GENPLT		OMLAB OMLAB OMLAB PLANT REVCLAIM OTHOMINF	
DELIVERY COMPONENTS OPERATION & MAINT EXP CONT-14	ADMIN & GENERAL EXP CONT 926-Employees Pensions & Benefits 1 Employees Pensions & Benefits 2 Medical & Dental Benefits Adj 3 Pension & PBOP Expense 4 Total Account 926	928-Regulatory Commission Expenses 5 Regulatory Commission Expenses 6 Rate Case Expense Adj 7 Total Account 928 8 929-Duplicate Charges-Cr	9 Miscellaneous General Exp 10 Charitable Contributions Adj 11 Research & Develop GRI/GTI Adj 12 Total Account 930	931 Rents 13 Rents - General & Admin 14 Metscan Lease Expense 15 Metscan Lease Expense Adj 16 Water Heater Lease Expense 17 Itron Lease Payment Adj 18 Total Account 931 19 Total Operation Expense Maintenance	932 Maintenance of General Plant 20 Maintenance of General Plant 21 ERC Remediation Adj 22 Total Account 932 23 Total Administrative & General Exp 24 Total Gas O&M Exp Before Other Adj	ADJUSTMENTS TO O&M EXPENSES 25 Total Gas Operation & Maintenance Exp	26 Payroll - Union Adjustment 27 Payroll - Non-Union Adjustment 28 Incentive Compensation Adjustment 29 Gain on Sale of Property Adjustment 30 Farm Sales Adjustment 31 Inflation Adjustment	32 Total Adjusted Gas Oper & Maint Exp

## BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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30-Jun-05

DELIVERY COMPONENTS						
	\ 	HIGH WINTER LRG HI ANNUAL	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53
OPERATION & MAINT EXP CONT-14		3	) ; ; ;	, , , , , , , , , , , , , , , , , , ,		
ADMIN & GENERAL EXP CON'T 926-Employees Pensions & Benefits						
Employees Pensions & Benefits	LABOR	91,705	123,816	247,470	211,603	362,447
Medical & Dental Benefits Adj	LABOR	7,521	10,154	20,295	17,353	29,724
Pension & PBOP Expense Total Account 926	PENSION	43,548	206,030	392,587	331,396	558,050
928-Regulatory Commission Expenses			-			
Regulatory Commission Expenses	REVCLAIM	2,962	4,798	8,565	7,229	11,781
Rate Case Expense Adj	REVCLAIM	2,735	4,430	7,909	6,675	10,878
Total Account 928 929-Duplicate Charges-Cr	REVCLAIM	760°C	0	0	0	0
930-Miscellaneous General Exp						
Miscellaneous General Exp	REVCLAIM	5,777	9,358	16,706	14,100	22,979
Charitable Contributions Adj	REVCLAIM	(1,214)	(1,967)	(3,511)	(2,964)	(4,830)
Research & Develop GRI/GTI Adj	REVCLAIM	2,556	4,140	7,391	6,238	10,167
Total Account 930		7,119	11,531	20,586	17,374	28,316
0		0 001	14 726	26.289	22 188	36 161
Keriis - General & Adrilli	NEVCLAIM TOTAL	9,09	408 404	407 855	73 085	34 120
Metscan Lease Expense	PL139/M	9,05	(75 850)	1119 7661	(44 830)	(20,680)
Metscan Lease Expense Adj	FL139788	(000,0)	1 670	(113,100)	7 404	14 721
Water Heater Lease Expense	PL 1380	3,120	8,079 8,050	105,00	4 763	2 197
Total Account 031	1 200 1	17 232	73.698	123.262	63.509	66,527
Total Operation Expense		404,490	658,798	1,184,329	970,583	1,593,260
: !						
932 Maintenance of General Plant						
Maintenance of General Plant	GENPLT	19,445	30,344	58,732	46,756	76,710
ERC Remediation Adj	GENPLT	(11,446)	(17,862)	(34,572)	(27,522)	(45,155)
Total Account 932		7,999	12,482	24,160	19,233	31,555
Total Administrative & General Exp		412,489	0.07,176	1,206,460	010,808	0.10,420,1
Total Gas O&M Exp Before Other Adj		765,151	1,234,940	2,183,811	1,808,618	3,021,349
ADJUSTMENTS TO O&M EXPENSES Total Gas Operation & Maintenance Exp		765,151	1,234,940	2,183,811	1,808,618	3,021,349
Downell - Hains Adinetment	OMIAB	10.485	16.503	30.380	24.898	41,478
Payroll - Non-Thion Adiustment	OMI AB	3.966	6.242	11,491	9,417	15,689
Incentive Compensation Adjustment	OMLAB	(1,112)	(1,750)	(3,221)	(2,640)	(4,398)
Gain on Sale of Property Adjustment	PLANT	(4,439)	(5,278)	(10,763)	(10,293)	(17,549)
Farm Sales Adjustment	REVOLAIM	126	205	365	308	502
inflation Adjustment	CHOMIN	11,490	10,204	51,234	6+0'07	40,4
Total Adjusted Gas Oper & Maint Exp		785,667	1,267,065	2,243,318	1,856,958	3,102,485

30-Jun-05

HIGH WINTER HIGH ANNUAL G-42 & T-42		6,705 (5,957) 748	811,250 (599,418) 211,832 212,580	1,987 2,201 1,676 15,270 21,134	165 6,266	11,607	13,148 59,890	354,386 262,269	2,192 826.709	1,613	242,751	42,457	15,543	Bay Aft Agt	/ St 958ch	ate	Gas Col ©D‡T.E. ₽AG-22 age 29	mpany 05-27 2-44(1) of 322
HIGH WINTER MED ANNUAL G-41 & T-41		9,503 (8,442) 1,061	1,266,979 (936,148) 330,831 331,892	2,540 2,813 2,141 19,515 27,009	211 8,008	14,833 157,468	16,803 76,537	452,897 335,174	2,801	2,061	313,429	94,480 144,556	52,920	121,553	4,928	166,412	31,410 1,911,022	
HIGH WINTER LOW ANNUAL G-40 & T-40		7,574 (6,729) 845	997,395 (736,957) 260,438 261,283	1,249 1,383 1,053 9,596 13,281	104	7,294 77,434	8,263	222,709 164,820	1,377	1,013	908,105	80,115	44,874	59,773	2,423 19 636	81,832	. 15,446 1,797,710	
OUTDOOR LIGHTING		0 0 0	28 (21) 7 7	000	0 0	0	<b>←</b> Ø	4	0 34	; O +	-0	0 0	0	4	0 -	- w	42	
RESIDENTIAL NON-HEATING R-1 & R-2		6,019 (5,347) 672	819,609 (605,595) 214,015 214,687	210 233 177 1,616	17 663	1,228	1,391 6,337	37,498	232	171	3,390 1,269,221	92,632	51,884	10,064	408	13,778	2,601 1,663,565	
RESIDENTIAL HEATING R-3 & R-4		66,524 (59,100) 7,424	8,746,186 (6,462,399) 2,283,787 2,291,212	10,969 12,147 9,247 84,273 116,636	912 34,583	64,057 680,014	72,561 330,520	1,955,796	12,096 4 562 465	8,899	177,142 8,434,972	601,457 920.240	336,884	524,915	21,281	718,638	135,643 15,931,835	
TOTAL COMPANY		109,644 (97,408) 12,236	14,354,255 (10,606,099) 3,748,156 3,760,392	20,732 22,960 17,479 159,289 220,460	1,723 65,367	121,077	137,152 624,734	3,696,753	22,864 8 623 755	16,821	334,825 11,620,315	986,673	552,649	992,169	40,224	1,358,335	256,386 25,326,476	
ALLOC		PLT301 PLT301	PLT303 PLT303	PLT305 PLT311 PLT320 PLT321	PLT365 PLT366	PLT367BS PLT367JC	PLT367CI PLT367CP	PLT367CS PLT367P	PLT367P	PLT368	PLT380	PLT381 PLT382	PLT383	PLT3860	PLT3862	2000	PLT387	
DELIVERY COMPONENTS DEPRECIATION & AMORT EXPENSE-15	DEPRECIATION & AMORTIZATION EXP	IN INVISIBLE PLAN I ANIOR ILEA HON 301 Organization Creation Adj Organization Total Account 301 202 Mice Advantable Days	Adj Nipsco Amortization  Adj Nipsco Amortization  Total Account 303  Total Intangible Plant Amortization	PRODUCTION PLANT DEPRECIATION 8 305 Structures & Improvements 9 311 L.P. Gas Equipment 10 320 Other Equipment 11 321 L.N.G. Equipment Total Production Plant Depreciation	DISTRIBUTION PLANT DEPRECIATION 13 365 Right of Way 14 366 Structures & Improvements 367 Gas Mains	15 Gas Mains - Bare Steel 16 Gas Mains - Joint Clamping	<ul><li>17 Gas Mains - Cast fron</li><li>18 Gas Mains - Cathodic Protection</li></ul>		21 Adj Gas Mains - Plastic			26 381 Gas Meters 27 382 Meter Installations		386 Other Property on Custs Premises 29 Gas Water Heaters	30 Cascade Diamond Boilers		<ul><li>33 387 Other Equipment</li><li>34 Total Distribution Plant Depreciation</li></ul>	

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	
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30-Jun-05 11:19 AM

LOW WINTER LRG HI ANNUAL	G-53 & T-53		4,837 (4,297) 540	598.627 (442,315) 156,312 156,852	1,645 1,822 1,387 12,642 17,497	137 5,188	9,609 102,009 10,885 49,581 293,389	217,128 1,815 684,416 1,335	26,573 45,359 6,990 10,695 3,915	78,743 3,192 25,868 107,803 20,348 912,759
LOW WINTER HIGH ANNUAL	G-52 & T-52		2,837 (2,520) 317	349,489 (258,231) 91,258 91,574	828 917 698 6,358 8,800	69 2,609	4,833 51,308 5,475 24,938 147,567	109,209 109,209 344,242 671	13,366 97,644 15,153 23,185 8,487	39,605 1,606 13,011 54,222 10,234 569,883
LOW WINTER MED ANNUAL	G-51 & T-51		2,966 (2,635) 331	408,729 (302,003) 106,727 107,058	711 787 599 5,462 7,560	59 2,242	4,152 44,077 4,703 21,423	93,818 784 295,727 577	11,482 117,362 40,482 61,939 22,675	34,024 1,379 11,177 46,580 8,792 607,917
LOW WINTER LOW ANNUAL	G-50 & T-50		1,455 (1,292) 162	204,499 (151,100) 53,398 53,561	177 195 149 1,356 1,877	15 557	1,031 10,943 1,168 5,319 31 473	23,47,3 22,292 195 73,419 143	2,851 181,145 25,641 39,232 14,362	8,447 342 2,775 11,564 2,183 351,112
HIGH WINTER 1 RG HI ANNITAL	G-43 & F-43		1,223 (1,087) 137	151,463 (111,913) 39,550 39,686	416 461 351 3.200 4,428	35 1,313	2,432 25,818 2,755 12,549 74,545	74,233 54,953 459 173,221 338	6,725 10,327 1,973 3,018 1,105	19,929 808 6,547 27,284 5,150 230,488
	ALLOC		PLT301 PLT301	PLT303 PLT303	PLT305 PLT311 PLT320 PLT321	PLT365 PLT366	PLT367BS PLT367JC PLT367CI PLT367CP	PLT367P PLT367P PLT368	PLT369 PLT380 PLT381 PLT382	PLT3860 PLT3862 PLT3863 PLT387
DELIVERY COMPONENTS	DEPRECIATION & AMORT EXPENSE-15	DEPRECIATION & AMORTIZATION EXP	inTanGIBLE PLANT AMORTIZATION 301 Organization Organization Adj Organization Total Account 301	303 Misc. Intangible Plant Misc. Intangible Plant Adj Nipsco Amortization Total Account 303 Total Intangible Plant Amortization	PRODUCTION PLANT DEPRECIATION 305 Structures & Improvements 311 L.P. Gas Equipment 320 Other Equipment 321 L.N.G. Equipment Total Production Plant Depreciation	DISTRIBUTION PLANT DEPRECIATION 365 Right of Way 366 Structures & Improvements 367 Gas Mans		Gas Mains - Coaled Steel Gas Mains - Plastic Adj Gas Mains - Plastic Total Account 367 368 Compressor Station Equipment		386 Other Property on Cust's Premises Gas Water Heaters Cascade Diamond Boilers Conversion Burners Total Account 386 387 Other Equipment Total Distribution Plant Depreciation
			~ 0 m	4 5 9 1	8 9 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	13	\$ 2 7 8 6	22223	24 25 26 27 28	29 30 32 33 33 34

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 31 of 322

11:19 AM

30-Jun-05

16,736 54,727 71,463 17,820 313 4,430 2,697

111,608 489

27,831

6,918 4,213

8,337

13,021

1,291 1,291

1,650

HIGH ANNUAL G-42 & T-42

HIGH WINTER

27,354 4,514 4,479 36,347

42,720 15,371 15,249

(3,483)

(5,736)

74,342

253,117

1,797,485

2,756,481

133,139

224,506

73,340

6/30/2005 11:41 AM

LOW WINTER LRG HI ANNUAL G-53 & T-53

1,069 1,069

6,152 6,152

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COMPANY VICE STUDY JEMBER 31, 2004	LOW WINTER LOW WINTER MED ANNUAL HIGH ANNUAL		462 538 462 538	4,201 3,592 4,201 3,592	÷			8,978 7,677 158 135				6,586 2,465 6,534 2,446			75,668 58,393	(1,908) (1,519)	108,455 40,596
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER L		115	2,102 2,102		4,219 13,796	18,014	4,492 79	1,117	089	6,895	4,172	15,205	17	39,604	(986)	68,695
	HIGH WINTER I RG HI ANNI JAI	G-43 & T-43	271	1,557 1,557		3,125 10,218	13,342	3,327	827	504	5,107	321	5,746	13	23,818	(632)	5,285
11:19 AM		ALLOC	PLT379	PLT390		PLT3910E PLT391IT		PLT392 PIT393	PLT394	PLT396	PLT3970	PLT397E	FL139/10	PLT398		GENPLT	PLT397M
30-Jun-05	DELIVERY COMPONENTS	DEPREC & AMORT EXP CONT-16	TRANSMISSION PLANT DEPRECIATION 379 Other Equipment Total Transmission Plant Depreciation	GENERAL PLANT DEPRECIATION 390 Structures & improvements Total General Plant Depreciation	GENERAL PLT DEPRECIATION (Equip)	Office Equipment Office IT Equipment	Total Account 391	392 Transportation Equipment	394 Tools, Shop & Garage Equipment	1 396 Power Operated Equipment 397 Communication Equipment	2 Communications Equipment Other		4 Communications Equip Metscall 5 Total Account 397	398	7 Tot Gen Plt Depreciation (Equip)	8 Adj Depreciation Exp Alloc Mgt. Fee	9 Adj Amortization of Metscan Devices

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12,349 40,384 52,733 13,150 231 3,269 1,990

(2,492)

18,727 1,204,437

771,858

909,411

516,079

304,901

Total Depreciation & Amortization Exp

3 3 20

20,185 1,137 1,128 22,450 51 93,874

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

HIGH WINTER HIGH ANNUAL G-42 & T-42	134,907 4,963 139,859	421,474 18,518 439,992	3,929 0 3,929 443,921	2,145 2,145	585,925	73,815	371,630	(22,275)	15,711	438,881	5,800	7,142,823	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 33 of 322
HIGH WINTER MED ANNUAL G-41 & T-41	210,692 7,735 218,427	597,313 26,244 623,557	5,569 0 5,569 629,126	3,344	850,898	154,128	775,974	(31,568)	22,265	920,799	21,937	11,445,765	2,491,794
HIGH WINTER LOW ANNUAL G-40 & T-40	165,862 6,089 171,951	476,098 20,318 497,016	4,439 0 4,439 501,455	2,946 2,946	676,351	63,341	318,898	(25,162)	17,747	374,824	23,620	9,662,388	1,319,863
OUTDOOR	N C N	41 61	0002	0	20	∞	43	(1)	<del></del>	51	0	347	107
RESIDENTIAL NON-HEATING R-1 & R-2	136,297 5,004 141,301	378,332 16,623 394,955	3,527 0 3,527 398,482	2,836 2,836	542,618	(277,163)	(1,395,408)	(19,995)	14,103	(1,678,463)	36	7,109,407	(2,077,772)
RESIDENTIAL HEATING R-3 & R-4	1,454,445 53,396 1,507,841	4,181,374 . 183,716 4,365,090	38,984 0 38,984 4,404,074	26,194 26,194	5,938,109	1,008,544	5,077,629	(220,985)	155,864	6,021,052	891	87,250,416	16,009,834
TOTAL	2,387,037 87,634 2,474,671	6,891,738 302,801 7,194,539	64,253 0 64,253 7,258,792	41,974	9,775,438	1,187,910	5,980,668	(364,227)	256,894	7,061,245	72,506	137,759,166	22,222,531
ALLOC	LABOR	PLANT	PLANT PLANT	REVCLAIM							TOTCDEP		
DELIVERY COMPONENTS STATE & FED TAXES & OTH EXP-17	TAXES OTHER THAN INCOME Payroll Taxes 1 Payroll Taxes 2 Payroll Tax Adjustment 3 Total Payroll Taxes	Plant Related Taxes Property Taxes 4 Property Taxes 5 Property Tax Adjustment 6 Total Property Tax S	Other Taxes 7 Other Taxes 8 Other Tax Adjustment 9 Total Other Taxes 10 Total Plant Related Taxes	Revenue Related Taxes 11 Other State Taxes 12 Total Revenue Related Taxes	13 Total Taxes Other Than Income	FEDERAL & STATE INCOME TAXES 14 State Tax @ 6.50%	15 Federal Tax @ 35.00%	16 Amortization of ITC	17 Deferred Tax Flowback	18 Total Income Tax Expense	19 INTEREST ON CUSTOMER DEPOSITS	20 Total Expenses	21 Net Operating Income

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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30-Jun-05

	DELIVERY COMPONENTS		HIGH WINTER	LOW WINTER	LOW WINTER	LOW WINTER	LOW WINTER	
	STATE & FED TAXES & OTH EXP-17	ALLOC	LRG HI ANNUAL G-43 & T-43	LOW ANNUAL G-50 & T-50	MED ANNUAL G-51 & T-51	HIGH ANNUAL G-52 & T-52	LRG HI ANNUAL G-53 & T-53	
	TAXES OTHER THAN INCOME Payroll Taxes							
~	Payroll Taxes	LABOR	25,188	34,007	67,970	58,118	99,549	
0 0	Payroll Tax Adjustment Total Payroll Taxes	LABOR	925 26,112	1,248 35,256	2,495 70,465	2,134 60,252	3,655 103,203	
	Plant Related Taxes							
	Property Taxes							
4	Property Taxes	PLANT	76,899	91,445	186,453	178,312	304,025	
S	Property Tax Adjustment	PLANT	3,379	4,018	8,192	7,834	13,358	
9	Total Property Taxes		80,278	95,463	194,645	186,146	317,383	
r	Omer Laxes	54	7.7	д 5.	1 738	1,689	2834	
٠ ،	Other laxes	FLAN			00.7.	200,	5,005	
30 C	Other Lax Adjustment	L'AN	0 0 242	843	1738	1 662	2 834	
n Ç	Total Diant Delated Toxes		80 995	96.315	196.384	187.809	320.217	
2	I otal Piarit Related Taxes		000,000		100			
	Revenue Related Taxes							
<del>/</del>	Other State Taxes	REVCLAIM	378	612	1,093	923	1,503	
12	Total Revenue Related Taxes		378	612	1,093	923	1,503	
13	Total Taxes Other Than Income		107,485	132,183	267,942	248,983	424,924	
	FEDERAL & STATE INCOME TAXES							
4	State Tax @ 6.50%		(1,239)	(6,083)	7,293	50,122	115,144	
5	Federal Tax @ 35.00%		(6,237)	(30,627)	36,716	252,343	579,707	
16	Amortization of ITC		(4,064)	(4,833)	(9,854)	(9,424)	(16,068)	
17	Deferred Tax Flowback		2,866	3,409	6,950	6,647	11,333	
5	Total Income Tax Expense		(8,674)	(38,135)	41,105	299,688	690,117	
19	19 INTEREST ON CUSTOMER DEPOSITS	TOTCDEP	2,030	5,725	9,298	2,779	391	
20	Total Expenses		1,191,409	1,882,918	3,471,074	3,180,266	5,422,354	
21	21 Net Operating Income		130,557	79,137	388,771	787,954	1,647,190	

30-Jun-05 11:19 AM

HIGH WINTER HIGH ANNUAL G-42 & T-42	74-C X 7-4-C		8,587,921	4,314,731 1,797,485 585,925	5,800 748,363	1,135,615	0	1,135,615	73,815	1,061,800	371,630	371,630	(22,275)	15,711	438,881	1,445,098	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 35 of 322
HIGH WINTER MED ANNUAL G-A1 & T-41	4-1 × 1-1-5		13,937,559	6,895,650 2,756,481 850,898	21,937 1,041,396	2,371,197	0	2,371,197	154,128	2,217,069	775,974	775,974	(31,568)	22,265	920,799	2,491,794	
HIGH WINTER LOW ANNUAL	04-1-8 04-5		10,982,251	6,115,577 2,472,016 676,351	23,620	974,478	0	974,478	63,341	911,137	318,898	318,898	(25,162)	17,747	374,824	1,319,863	
OUTDOOR	בופאו		453	222 54 20	0 27	131	0	131	æ	122	43	43	(1)	<del>V</del>	51	107	
RESIDENTIAL NON-HEATING	7-7 & I-7		5,031,635	5,956,449 2,288,766 542,618	36 507,808	(4,264,043)	0	(4,264,043)	(277,163)	(3,986,880)	(1,395,408)	(1,395,408)	(19,995)	14,103	(1,678,463)	(2,077,772)	
RESIDENTIAL HEATING	7.5 4.7.5 4.7.5 4.7.5 4.7.5 4.7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5		103,260,249	53,748,281 21,542,084 5,938,109	891 6,514,829	15,516,056	0	15,516,056	1,008,544	14,507,512	5,077,629	5,077,629	(220,985)	155,864	6,021,052	16,009,834	
TOTAL	COMPANY		159,981,697	86,286,405 34,563,572 9,775,438	72,506 11,008,243	18,275,534	0	18,275,534	1,187,910	17,087,624	5,980,668	5,980,668	(364,227)	256,894	7,061,245	22,222,531	6.50% 35.00% 0.60775 0.39225 0.32725 1.64541 2.85% 11.564%
( - -	ALLOC 8	79					PLANT						PLANT	PLANT			
DELIVERY COMPONENTS	DEVELOPMENT OF INCOME TAXES-18	FEDERAL & STATE TAX CALCULATION	1 Operating Revenues	Operating Expenses 2 Operation & Maintenance Expense 3 Depreciation & Amortization Expense 4 Taxes Other Than Income	Interest Expense 5 Interest on Customer Deposits 6 Interest Expense	7 Book Taxable Income	Adjustments to Taxable Income 10 Deductions	11 Taxable Basis State Franchise Tax	Less: 12 State Tax @ 6.50%	13 Federal Taxable Basis	14 Federal Income Tax @ 35.00%	15 Federal Income Tax Liability	16 Amortization of ITC	17 Deferred Tax Flowback	18 Total Income Tax Expense	19 Net Income After Tax	Effective State Tax Rate Federal Tax Rate - Current 1 - Incremental Tax Rate Incremental Tax Rate Incremental Fate Effective Incremental Federal Rate Factor for Taxable Basis Interest Expense Percentage Purchased Cas Working Capital % Other O&M Working Capital %

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6/30/2005 11:42 AM

Effective State Tax Rate
Federal Tax Rate - Current
1 - Incremental Tax Rate
Incremental Tax Rate
Incremental Tax Rate
Effective Incremental Federal Rate
Factor for Taxable Basis
Interest Expense Percentage
Purchased Gas Working Capital %
Other O&M Working Capital %

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30-Jun-05

	:	HIGH WINTER LRG HI ANNUAL	LOW WINTER LOW ANNUAL	LOW WINTER MED ANNUAL	LOW WINTER HIGH ANNUAL	LOW WINTER LRG HI ANNUAL
DEVELOPMENT OF INCOME TAXES-18	ALLOC	G-43 & T-43	G-50 & T-50	G-51 & T-51	G-52 & T-52	G-53 & T-53
FEDERAL & STATE TAX CALCULATION						
Operating Revenues		1,321,966	1,962,055	3,859,846	3,968,220	7,069,543
Operating Expenses Operation & Maintenance Expense Depreciation & Amortization Expense Taxes Other Than Income		785,667 304,901 107,485	1,267,065 516,079 132,183	2,243,318 909,411 267,942	1,856,958 771,858 248,983	3,102,485 1,204,437 424,924
nterest Expense Interest on Customer Deposits Interest Expense		2,030 140,942	5,725 134,592	9,298 317,681	2,779 316,539	391 565,855
Book Taxable Income		(19,059)	(93,590)	112,196	771,103	1,771,451
Adjustments to Taxable Income Deductions	PLANT	0	0	0	0	0
11 Taxable Basis State Franchise Tax		(19,059)	(63,590)	112,196	771,103	1,771,451
əss; State Tax @ 6.50%		(1,239)	(6,083)	7,293	50,122	115,144
13 Federal Taxable Basis		(17,820)	(87,507)	104,903	720,981	1,656,306
Federal Income Tax @ 35.00%		(6,237)	(30,627)	36,716	252,343	579,707
15 Federal Income Tax Liability		(6,237)	(30,627)	36,716	252,343	579,707
Amortization of ITC	PLANT	(4,064)	(4,833)	(9,854)	(9,424)	(16,068)
Deferred Tax Flowback	PLANT	2,866	3,409	6,950	6,647	11,333
Total Income Tax Expense		(8,674)	(38,135)	41,105	299,688	690,117
Net Income After Tax		130,557	79,137	388,771	787,954	1,647,190

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11:19 AM

30-Jun-05

DELIVERY COMPONENTS	MPONENTS			RESIDENTIAL	RESIDENTIAL		HIGH WINTER	HIGH WINTER	HIGH WINTER
FINDAGO		ALLOC	TOTAL COMPANY	HEATING R-3 & R-4	NON-HEATING R-1 & R-2	OUTDOOR LIGHTING	LOW ANNUAL G-40 & T-40	MED ANNUAL G-41 & T-41	HIGH ANNUAL G-42 & T-42
DEVELOPMEN	DEVELOPMENT OF LABOR ALLOC-19								
DEVELOPMENT	DEVELOPMENT OF LABOR ALLOCATOR								
LIQUEFIED PROP	LIQUEFIED PROPANE PROD LABOR								
Operation Labor		000	4.6044	8 170	7	c	703	1 434	4 110
1 710-Supervision	9090	EXP717	//0,11	6,176	- - -	<b>&gt;</b> ©	9	12	-
3 719-Handling Expense	pense	EXP719	4,430	2,344	45	0	267	543	425
	735-Miscellaneous Production Exp	EXP735	34,788	18,405	353	0	2,096	4,262	3,335
5 Total Operation Labor	Labor		50,994	26,979	517	0	3,072		4,889
Maintenance Labor	<b>h</b> r					,			4
6 740-Supervision		LABPM	2,791	1,477	28	0	168	342	268
	741-Maintenance of Struct & Improv	EXP741	1,251	662	13	0	75	153	120
8 742-Maintenance	742-Maintenance of Production Equip	EXP742	12,427	6,575	126	0	749	1,522	1,191
9 Total Maintenance Labor	nce Labor		16,470	8,713	167	0	992	2,018	1,579
10 Total Liquefled Propane Prod Labor	opane Prod Labor		67,464	35,692	684	0	4,064	8,265	6,467
LIQUEFIED NATU	LIQUEFIED NATURAL GAS LABOR								
Operation Labor									
11 750-Supervision		LABLO	129,742	68,641	1,316	τ	7,816	15,895	12,438
12 754-Liquefaction Expense	Expense	EXP754	37,215	19,689	377	0	2,242	4,559	3,568
13 757-Vaporization Expense	Expense	EXP757	989'9	3,484	29	0	397	202	631
14 759-Handling Expense	pense	EXP759	5,818	3,078	29	0	351	713	866
	775-Miscellaneous Production Exp	EXP775	105,157	55,634	1,067	0	6,335	12,883	10,081
16 777-Lease Expense	)Se	EXP777	0	0	0	0	0	0	0
17 Total Operation Labor	Labor		284,519	150,527	2,886	~	17,141	34,857	27,275
Maintenance Labor	<b></b>								
18 780-Supervision		LABLM	1,826	996	19	0	110	224	175
19 781-Maintenance	781-Maintenance of Struct & Improv	EXP781	1,151	609	12	0	69	141	110
20 782-Maintenance	782-Maintenance of Production Equip	EXP782	30,354	16,059	308	0	1,829	3,719	2,910
21 Total Maintenance Labor	nce Labor		33,331	17,634	338	0	2,008	4,083	3,195
	Total Liquefied Natural Gas Prod Labor		317,850	168,161	3,224	~	19,149	38,940	30,470
70to London Dood which a	2000		385 214	203 853	3 908	0	23.213	47.206	36.938
Z3 (Otal Producting	og Labor		F10,000	200,004	22.0	J		1	, , , , , , , , , , , , , , , , , , ,

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 38 of 322

	30-Jun-05	11:19 AM		BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	AS COMPANY ERVICE STUDY DECEMBER 31, 2004	44	
	DELIVERY COMPONENTS		HIGH WINTER LRG HI ANNUAL	LOW WINTER LOW ANNUAL	LOW WINTER MED ANNUAL	LOW WINTER HIGH ANNUAL	LOW WINTER LRG HI ANNUAL
	DEVELOPMENT OF LABOR ALLOC-19	ALLOC	G-43 & T-43	G-50 & T-50	G-51 & T-51	G-52 & T-52	G-53 & T-53
	DEVELOPMENT OF LABOR ALLOCATOR						
	LIQUEFIED PROPANE PROD LABOR						
~	Operation Labor 710-Supervision	LABPO	235	66	400	466	927
2	717-LPG Gas Expenses	EXP717	2	<del>****</del>	ĸ	4	8
l m	719-Handling Expense	EXP719	89	38	152	177	352
4	735-Miscellaneous Production Exp	EXP735	669	296	1,193	1,389	2,761
S	Total Operation Labor		1,024	434	1,749	2,036	4,047
¢	Wall teliation Labor	ABPM	56	24	96	£	222
·	741-Maintenance of Struct & Improv	EXP741	25	<u></u>	43	20	66
. α	742-Maintenance of Production Equip	EXP742	250	106	426	496	986
6	Total Maintenance Labor		331	140	565	657	1,307
10	Total Liquefied Propane Prod Labor		1,355	574	2,313	2,693	5,354
	LIQUEFIED NATURAL GAS LABOR						
	Operation Labor		4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			f C	100 04
-	750-Supervision	LABLO	2,606	1,105	4,449	5,179	10,297
2	754-Liquefaction Expense	EXP754	748	317	1,276	1,486	2,954
3	757-Vaporization Expense	EXP757	132	56	226	263	523
4	759-Handling Expense	EXP759	117	99	500	232	462
ťΩ	775-Miscellaneous Production Exp	EXP775	2,112	895	3,606	4,198	8,346
16	777-Lease Expense	EXP777	0	0	0	0	0
11	Total Operation Labor		5,715	2,422	9,757	11,357	22,581
	Maintenance Labor		ţ	ζ,	c c	47	10.0
φ (	780-Supervision	LABLM	3/	10	503	C 44	<u> </u>
20 0	781-Maintenance of Struct & Improv	EXP/0:	810	258	1 041	1 2 1 2	2 409
3 3	/82-Maintenance of Production Equip	EAF 102	010	2007	11/3	1 224	2 845
22	lotal Maintenance Labor Total Liquefied Natural Gas Prod Labor		6,384	2,706	10,900	12,688	25,226
23	Total Production Labor		7.740	3,280	13,213	15,381	30,580
3			1				

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 39 of 322

11:19 AM

30-Jun-05

HIGH WINTER HIGH ANNUAL	G-42 & T-42		32,323	0						4 23,605	_	4 663,975			8 2,088			9 17,229				289,611	4 953,587
HIGH WINTER MED ANNUAL	G-41 & T-41		53,668		)	30,322	153,403	373,813	453,254	37,974		1,102,434	ò	387	2,668	268,688		22,019	34,026	29,948	31,45	389,190	1,491,624
HIGH WINTER I OW ANNIAL	G-40 & T-40		36,196	0	0 ;	14,911	127,037	316,977	222,885	25,522	0	743,527		987	1,312	132,125	0	10,828	98,583	25,395	15,465	283,994	1,027,521
CHINOOR	SOCIO		<del>,</del>	0	0	<del>v</del>	4	0	4	<b>4</b> -	0	21	,	0	0	<b>්</b>	0	<del></del>	٥	0	~	10	32
RESIDENTIAL	R-1 & R-2		26,745	0	0	2,511	97,790	366,499	37,527	18,310	0	549,382		196	221	22,246	0	1,823	137,785	29,362	2,604	194,237	743,619
RESIDENTIAL	R-3 & R-4		298,192	0	0	130,944	1,147,111	2,379,678	1,957,338	212,102	0	6,125,365			11,523	1,160,305	0	95,085	915,691	190,647	135,812	2,511,595	8,636,961
LATOT	COMPANY		516,364	0	0	247,504	1,872,344	3,903,793	3,699,668	367,296	0	10,606,968		4,263	21,780	2,193,154	0	179,726	1,261,488	312,751	256,706	4,229,868	14,836,836
	ALLOC		LABDO	EXP851	EXP852	EXP857	EXP874	EXP878	EXP879	EXP880	EXP881			LABDM	EXP886	EXP887	EXP888	EXP889	EXP892	EXP893	EXP894		
DELIVERY COMPONENTS	DEVEL OF LABOR ALLOC CON'T-20	TRANSMISSION & DISTRIB LABOR	Operation Labor  1 850-Operation Supervision & Engineer	2 851-System Control & Load Dispatch	3 852-Communication System Exp	4 857-Measuring & Regulating Stat Exp	5 874-Mains and Services Exp			8 880-Other Expenses		10 Total Operation Labor	Maintenance Labor	11 885-Supervision	12 886-Maintenance of Struct & Improv	13 887-Maintenance of Mains	14 888-Maint of Compressor Station Equip	15 889-Maint of Meas & Reg Station Equip	16 892-Maintenance of Services		18 894-Maintenance of Other Equipment		20 Total Transmission and Distribution Labor
												···			4		•		1.5	•		•	. •

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 40 of 322

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004	
	30-Jun-05 11:19 AM		
	30-Jun-05		

Attachment AG-22-44

DELIVERY COMPONENTS		HIGH WINTER	LOW WINTER	LOW WINTER	LOW WINTER	LOW WINTER	
	ALLOC	LRG HI ANNUAL G-43 & T-43	LOW ANNUAL G-50 & T-50	MED ANNUAL G-51 & T-51	HIGH ANNUAL G-52 & T-52	LRG HI ANNUAL G-53 & T-53	
DEVEL OF LABOR ALLOC CON'T-20							
TRANSMISSION & DISTRIB LABOR							
Operation Labor							
850-Operation Supervision & Engineer	LABDO	5,820	8,305	18,068	14,200	22,845	
851-System Control & Load Dispatch	EXP851	0	0	0	0	0	
852-Communication System Exp	EXP852	0	0	0	0	0	
857-Measuring & Regulating Stat Exp	EXP857	4,971	2,107	8,487	9,880	19,643	
874-Mains and Services Exp	EXP874	22,341	21,567	44,967	49,676	88,583	
878-Meter & House Requiator Exp	EXP878	7,805	101,451	160,170	59,954	27,657	
879-Customer Installations Exp	EXP879	74,313	31,498	126,870	147,683	293,621	
880-Other Expenses	EXP880	4,309	5,667	12,578	10,293	16,934	
881-Rents	EXP881	0	0	0	0	0	
Total Operation Labor		119,560	170,594	371,140	291,686	469,283	
Maintenance Labor							
885-Supervision	LABDM	55	51	118	122	219	
886-Maintenance of Struct & Improv	EXP886	437	185	747	869	1,729	
887-Maintenance of Mains	EXP887	44,053	18,672	75,208	87,546	174,058	
888-Maint of Compressor Station Equip	EXP888	0	0	0	0	0	
889-Maint of Meas & Reg Station Equip	EXP889	3,610	1,530	6,163	7,174	14,264	
892-Maintenance of Services	EXP892	1,121	19,665	12,741	10,600	4,924	
893-Maint of Meters and House Regul	EXP893	625	8,128	12,832	4,803	2,216	
894-Maintenance of Other Equipment	EXP894	5,156	2,186	8,803	10,247	20,373	
Total Maintenance Labor		55,058	50,416	116,611	121,363	217,782	
Total Transmission and Distribution Labor		174,618	221,010	487,751	413,049	687,066	

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BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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30-Jun-05 11:19 AM

TOTAL   RESIDENTIAL   RESIDE	HIGH WINTER	HIGH ANNUAL G-42 & T-42		0.00	3,465	2,829	85,033	91,327		3,758	5,405	0	458	9,620
TOTAL   RESIDENTIAL   RESIDENTIAL   RESIDENTIAL   NON-HEATING   OUTDOOR   LOW ANN	HIGH WINTER	MED ANNUAL G-41 & T-41		1	7,832	10,753	187,843	206,428		5,167	7,456	0	605	13,228
TOTAL   RESIDENTIAL   RESIDENTIAL   TOTAL   HEATING   NON-HEATING   NO	HIGH WINTER	LOW ANNUAL G-40 & T-40		7	16,61/	38,833	382,529	437,979		4,424	6,499	,0	403	11,326
NT-21  LABCA  COMPANY  R-3 & R-4  R-1 & NON-HE  NON-HE  R-3 & R-4  R-1 &		OUTDOOR LIGHTING		ć	0	0	ಣ	m		0	0	0	0	0
NT-21  ALLOC COMPANY R-3  NT-21  LABCA 221,538  EXP902 647,138  4,970,313  xp EXP903 4,970,313  5,838,988  5,838,988  117,959  EXP912 117,959  EXP913 0  EXP913 0	RESIDENTIAL	NON-HEATING R-1 & R-2			21,953	75,485	481,181	578,619		5,156	7,729	0	315	13,199
TOTAL ALLOC COMPA NT-21 LABCA 22 EXP902 64 SA TOTAL LABSA 8 EXP913 EXP913 EXP913 EXP916	RESIDENTIAL	HEATING R-3 & R-4			161,416	502,943	3,590,011	4,254,370		51,368	75,897	0	4,240	131,506
xp kT-21		TOTAL COMPANY			221,538	647,138	4,970,313	5,838,988		80,141	117,959	0	7,065	205,166
IVERY COMPONENTS  FL OF LABOR ALLOC CONT-21  MER ACCOUNTS LABOR  Merer Reading Expenses  Just Records & Collection Exp  I Customer Accounts Labor  EXPENSES LABOR  Supervision  Perpensision  Jennonstrating & Selling Exp  derrising Exp  divertising Exp		ALLOC			LABCA	EXP902	EXP903			LABSA	EXP912	EXP913	EXP916	
DEV  CUSTO 901-5 902-4 903-7 903-7 903-7 911-5 911-5 913-A	DELIVERY COMPONENTS		DEVEL OF LABOR ALLOC CONT-21	CUSTOMER ACCOUNTS LABOR	1 901-Supervision	2 902-Meter Reading Expenses	3 903-Cust Records & Collection Exp	4 Total Customer Accounts Labor	SALES EXPENSES LABOR	5 911-Supervision	6 912-Demonstrating & Selling Exp	7 913-Advertising Exp	3 916-Miscellaneous Sales Exp	9 Total Sales Expenses Labor

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 41 of 322

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 42 of 322

30-unr-05	11:19 AM		BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	AS COMPANY ERVICE STUDY DECEMBER 31, 2004	47	
DELIVERY COMPONENTS	ALLOC	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53
DEVEL OF LABOR ALLOC CONT-21						
CUSTOMER ACCOUNTS LABOR		i e	c c	i c	0	0
901-Supervision	LABCA	565	3,288	2,695	1,404	147,2
902-Meter Reading Expenses	EXP902	349	8,127	4,888	1,511	1,419
903-Cust Records & Collection Exp	EXP903	13,985	75,258	63,445	35,612	55,415
Total Customer Accounts Labor		14,900	86,673	71,028	38,587	52,075
SALES EXPENSES LABOR						
911-Supervision	LABSA	789	894	2,001	2,130	4,454
912-Demonstrating & Selling Exp	EXP912	1,135	1,322	2,922	3,101	6,494
913-Advertising Exp	EXP913	0	0	0	0	0
916-Miscellaneous Sales Exp	EXP916	96	72	201	222	454
Total Sales Expenses Labor		2,020	2,288	5,124	5,453	11,402

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

11:19 AM

30-Jun-05

	DELIVERY COMPONENTS			RESIDENTIAL	RESIDENTIAL		HIGH WINTER	HIGH WINTER	HIGH WINTER
	DEVEL OF LABOR ALLOC CONT-22	ALLOC	TOTAL COMPANY	HEATING R-3 & R-4	NON-HEATING R-1 & R-2	OUTDOOR LIGHTING	LOW ANNUAL G-40 & T-40	MED ANNUAL G-41 & T-41	HIGH ANNUAL G-42 & T-42
	ADMINISTRATIVE & GENERAL LABOR								
	Operation Labor								
~	920-Administrative & General Salaries	EXP920	949,139	592,308	64,120	2	66,619	75,624	48,498
N	921-Office Supplies & Expenses	EXP921	5,207	3,249	352	0	365	415	266
ıκ	922-Administrative Exp Transferred-Cr	EXP922	0	0	0	0	0	0	0
4	923-Outside Services Employed	EXP923	212	136	14	0	4	16	0
S	924-Property Insurance	EXP924	0	0	0	0	0	0	0
9	925-Injuries & Damages	EXP925	21,840	13,629	1,475	0	1,533	1,740	1,116
7	926-Employees Pensions & Benefits	EXP926	13,038	8,064	780	0	914	1,105	701
œ	928-Regulatory Commission Expenses	EXP928	0	0	0	0	0		0
σ	929-Duplicate Charges-Cr	EXP929	0	0	0	0	0	0	0
, C	930-Miscellaneous General Exp	EXP930	103,138	64,363	6,968	0	7,239	8,218	5,270
=======================================	931 Rents	EXP931	0	0	0	0	0	0	0
5	Total Operation Labor		1,092,574	681,749	73,710	2	76,685	87,117	55,861
	Maintenance Labor						•	1	1
13	932 Maintenance of General Plant	EXP932	287,232	175,020	17,335	<del></del>	20,256	25,543	15,512
14	Total Administrative & General Labor		1,379,806	856,769	91,045	က	96,940	112,660	71,373
5	15 Total Gas Operation & Maintenance Labor		22,646,110	14,083,458	1,430,391	39	1,596,979	1,871,146	1,162,844
	CONSTRUCION LABOR CAPITILIZED								
5	Distribution/Transmission	DISTR	3,541,199	1,873,499	35,920	14	213,338	433,839	339,474
7	Metscan	PLT397M	8,430	5,139	791	0	684	807	237
23	ERT	PLT397E	794,442	484,276	74,584	0	64,506	76,073	22,343
5	Conversion Burners	CUST3863	12,391	6,555	126	0	746	1,518	1,188
20	Total Capitilized Labor		4,356,461	2,369,470	111,421	14	279,275	512,237	363,242
21	21 Sum of Allocated Labor Expense		27,002,571	16,452,928	1,541,812	53	1,876,254	2,383,384	1,526,086

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 43 of 322

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 44 of 322

6/30/2005 11:42 AM

11:19 AM

30-Jun-05

PELIVERY COMPONENTS
DELIVERY COMPONEN DELIVERY COMPONEN DEVEL OF LABOR ALLC DMINISTRATIVE & GENE peration Labor 920-Administrative & Gen 921-Office Supplies & Exp 922-Administrative Exp Tr 923-Outside Services Emp 924-Property Insurance 925-Injuries & Damages 926-Employees Pensions 926-Employees Pensions 926-Employees Pensions 926-Miscellaneous Genera 929-Duplicate Charges-Cr 929-Duplicate Charges-Cr 930-Miscellaneous Genera 931 Rents Total Operation Labor Inintenance Labor 101al Administrative & Gene Total Capition/Transmission Metscan Metscan Conversion Burners Total Capitlized Labor

11:19 AM

30-Jun-05

HIGH WINTER HIGH ANNUAL G-42 & T-42		26,258,360 1,445,098 5.50% 0.957 6,678,328 17,483,688		9,05% 2,376,382 8,210,675 1,532,347 22.95% 17,483,688 \$0,4696 \$0.0876	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 45 of 322
HIGH WINTER MED ANNUAL G-41 & T-41		36,540,215 2,491,794 6,82% 1,185 11,461,872 38,636,479 \$0,2967		9.05% 3.306.889 12.803.042 1.341.170 11.70% 38,636,479 \$0.3314 \$0.334	
HIGH WINTER LOW ANNUAL G-40 & T-40		25,270,489 1,319,863 5,22% 0,908 9,687,231 23,311,210 \$0,4156		9.05% 2,286,979 11,278,538 1,591,307 16,43% 23,311,210 \$0.4838 \$0.0683	
OUTDOOR		948 107 11.24% 1.953 377 2.728 \$0.1382		9.05% 86 343 (34) -9.06% 2,728 \$0.1257 -50.0125	
RESIDENTIAL NON-HEATING R-1 & R-2		17,817,826 (2,077,772) -11.66% -2.027 4,783,511 6,394,258 \$0.7481		9.05% 1,612,513 10,855,556 6.072.045 126.94% 6,394,268 \$1,6977 \$0.9496	
RESIDENTIAL HEATING R-3 & R-4		228.590,507 16,009,834 7.00% 1.217 92,580,903 247,703,740 \$0.3738		9.05% 20,687,441 100,277,501 7,696,598 8.31% 247,703,740 \$0.4048	
TOTAL		386,254,124 22,222,531 5.75% 1.000 139,737,043 365,949,048 \$0.3818		9.05% 34.955.98 160.688.861 20.951.818 14.99% 365.949.048 \$0.4391 \$0.0573	
ALLOC					
DELIVERY COMPONENTS	REVENUE REQUIREMENTS-23  PRESENT RATES	1 Rate Base 2 Net Operating Income (Present Rates) 3 Rate of Return (Present Rates) 4 Relative Rate of Return 5 Sales Revenues (Present Rates) 6 Annual Booked Therm Sales 7 Sale Revenue \$/Therm (Present Rates)	CLAIMED RATE OF RETURN	8 Claimed Rate of Return 9 Return Req for Claimed Rate of Return 10 Sales Revenue Required Claimed ROR 11 Revenue Deficiency Sales Revenues 12 Percent Increase Required 13 Annual Booked Therm Sales 14 Sales Revenue Required \$/Therm 15 Revenue Deficiency \$/Therm	

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31,
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30-Jun-05	11:19 AM		GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	ERVICE STUDY ECEMBER 31, 2004			
DELIVERY COMPONENTS		HIGH WINTER LRG HI ANNUAL	LOW WINTER LOW ANNUAL	LOW WINTER MED ANNUAL	LOW WINTER HIGH ANNUAL	LOW WINTER LRG HI ANNUAL	
REVENUE REQUIREMENTS-23	ALLOC	G-43 & T-43	G-50 & T-50	G-51 & T-51	G-52 & T-52	G-53 & T-53	
PRESENT RATES							
Rate Base		4,945,346	4,722,538	11,146,685	11,106,633	19,854,575	
Net Operating Income (Present Rates)		130,557	79,137	388,771	787,954	1,647,190	
Rate of Return (Present Rates)		2.64%	1.68%	3.49%	7.09%	8.30%	
Relative Rate of Return		0.459	0.291	909.0	1,233	7447	
Sales Revenues (Present Rates)		925,505	1,770,936	3,164,436	3,174,364	5,509,578	
Annual Booked Therm Sales		4,431,946	4,446,204	13,718,907	6,665,891	3,153,997	
Sale Revenue \$/Therm (Present Rates)		\$0.2088	\$0.3983	\$0.2307	\$0.4762	\$1.7469	
CLAIMED RATE OF RETURN							
Claimed Rate of Return		9.05%	9.05%	9.05%	9.05%	9.05%	
Return Red for Claimed Rate of Return		447.554	427,390	1,008,775	1,005,150	1,796,839	
Sales Revenue Required Claimed ROR		1,447,096	2,343,956	4,184,599	3,531,742	5,755,813	
Revenue Deficiency Safes Revenues		521,591	573,020	1,020,162	357,378	246,235	
Percent Increase Recuired		56.36%	32.36%	32.24%	11.26%	4,47%	
Annual Booked Therm Sales		4.431.946	4,446,204	13,718,907	6,665,891	3,153,997	
Sales Revenue Required \$/Therm		\$0.3265	\$0.5272	\$0.3050	\$0.5298	\$1,8249	
Revenue Deficiency \$/Therm		\$0.1177	\$0.1289	\$0.0744	\$0.0536	\$0.0781	

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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30-Jun-05

HIGH WINTER HIGH ANNUAL G-42 & T-42	18,466 18,466 18,466 9,5864%	920 18,466 19,386	205,273 2,289,761		9.5864%	8,533,527	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 47 of 322
HIGH WINTER MED ANNUAL G-41 & T-41	47,004 47,004 47,004 12.2512%	1,609 47,004 48,613	358,374 5,828,405		12.2512%	13,738,676	
HIGH WINTER LOW ANNUAL G-40 & T-40	31,505 31,505 31,505 6.0245%	757 31,506 32,262	168,590 3,906,613		6.0245%	12,507,429	
OUTDOOR LIGHTING	0 0 0 0.0004%	-0-	169 0		0.0004%	356	
RESIDENTIAL NON-HEATING R-1 & R-2	1,878 1,878 1,878 1,0143%	1,344 1,878 3,222	300,841 232,905		1.0143%	11,410,115	
RESIDENTIAL HEATING R-3 & R-4	257,370 257,370 257,370 52.9058%	17,260 257,370 274,630	3,862,967 31,913,801		52.9058%	111,553,441	
TOTAL	369,418 369,418 369,418 100,0000% 28.6%	28,184 369,418 397,602	6,288,068 45,807,643		100.000%	175,507,389	
AILOC			DBASE DREMAIN		DISTR	PENSION	
DELIVERY COMPONENTS ALLOCATION FACTOR TABLE-24 DEMAND RELATED	PRODUCTION ALLOCATORS 2 Design Day Remaining Demands - Sales 3 LPG Production Allocator - Prod Function 4 LNG Production Allocator - Prod Function 5 LPG & LNG Prod Alloc - Distr Function 6 LPG & LNG Distr Pressure Support %	7 8 Design Day Base Demands - Sales Cust 9 Design Day Remaining Demands - Sales 10 Total Design Day Sendout - Sales Cust 11	12 GAS COST ALLOCATORS 13 GAS COST ALLOCATORS 14 Base Demand Gas Costs 15 Remaining Demand Gas Costs 16	18 DISTRIBUTION ALLOCATORS	1 Distribution Allocator	2 Pension & PBOP Expense Allocator	4 & & & & & & & & & & & & & & & & & & &

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 48 of 322

	ER LOW WINTER UAL LRG HI ANNUA 52 G-53 & T-53
<b>7</b> 0	LOW WINTER HIGH ANNUAL G-52 & T-52
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY ONTHS ENDED DECEMBER 31, 20	LOW WINTER MED ANNUAL G-51 & T-51
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50
	HIGH WINTER LRG HI ANNUAL G-43 & T-43
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	COMPONENTS

		1,637 1,637 1,637 7,9364%	414 1,637 2,051	92,342 203,086		7.9364%	5,791,979	
		1,289 1,289 1,289 3.9918%	1,289 1,289 2,887	342,813 159,796		3.9918%	3,576,860	
; ;		4,381 4,381 4,381 3.4292%	2,853 · 4,381 7,234	638,567 543,192		3.4292%	4,358,376	
; ; ; ;		1,551 1,551 1,551 0,8514%	874 1,551 2,425	195,298 192,307		0.8514%	2,516,064	
3		4,337 4,337 4,337 2.0086%	554 4,337 4,891	122,834 537,777		2.0086%	1,520,567	
				DBASE DREMAIN		DISTR	PENSION	
ALLOCATION FACTOR TABLE-24	DEMAND RELATED	PRODUCTION ALLOCATORS  2 Design Day Remaining Demands - Sales  3 LPG Production Allocator - Prod Function  4 LNG Production Allocator - Prod Function  5 LPG & LNG Prod Alloc - Distr Function  6 LPG & LNG Distr Pressure Support %	8 Design Day Base Demands - Sales Cust 9 Design Day Remaining Demands - Sales 0 Total Design Day Sendout - Sales Cust	GAS COST ALLOCATORS Base Demand Gas Costs Remaining Demand Gas Costs	8 DISTRIBUTION ALLOCATORS	1 Distribution Allocator	2 3 Pension & PBOP Expense Allocator 4	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
			ALLOCATION FACTOR TABLE-24  DEMAND RELATED  PRODUCTION ALLOCATORS  Design Day Remaining Demands - Sales  LPG Production Allocator - Prof Function  LNG Production Allocator - Prof Function  LNG Production Allocator - Prof Function  LNG Production Allocator - Prof Function  2.0086%  1,551  4,381  1,289  1,581  4,381  1,289  2,0086%  2.0086%  2.0086%  2.0086%  7.8514%  3.9918%  7.8514%  3.9918%  7.852%  3.9918%  7.8534  4,381  4,381  4,381  4,381  4,389  7.868  1,569  4,381  4,389  7.868  1,560  1,561  4,381  1,289  1,589  1	ALLOCATION FACTOR TABLE-24  DEMAND RELATED  PRODUCTION ALLOCATORS Design Day Remaining Demands - Sales LPG Roduction Allocator - Prod Function LPG & LNG Production Allocator - Prod Function LPG & LNG Prod Allocator - Prod Allocator - Prod Allocator - Prod Allocator - Prod All	ALLOCATION FACTOR TABLE-24  DEMAND RELATED  PRODUCTION ALLOCATORS Design Day Remaining Demands - Sales Design Day Base Demands - Sales LPG & LNG Distr Pressure Support %  GAS COST ALLOCATORS  DEASE  DEASE  A, 337  4, 337  1, 551  4, 381  1, 289	ALLOCATION FACTOR TABLE-24  DEMAND RELATED  PRODUCTION ALLOCATORS  PRODUCTION ALLOCATORS  Design Day Remaining Demands - Sales  LOG & LNG Fooduction Allocator - Prod Function  LOG & LNG Fooduction Allocator - A.337  LOG & LNG Food	PRIDOCATION FACTOR TABLE-24         DEMAND RELATED         1.289         1.289           PRODUCTION ALLOCATORS Design Day Remaining Demands - Sales Production Allocator - Prod Function         4.337         4.337         4.381         1.289           LOG Production Allocator - Prod Function         LOG Production Allocator - Prod Function         2.0086%         4.337         4.381         1.289           LOG & LNG Prod Alloc - Distribution Allocator - Prod Function         LOG & LNG Prod Alloc - Distribution Allocator Prod Function         2.0086%         0.8514%         3.4292%         3.9918%           Design Day Base Demands - Sales Cust         4.337         4.337         2.425         7.234         2.887           Design Day Base Demands - Sales Cust         4.391         1.22.834         1.551         4.381         1.289           CAS COST ALLOCATORS         DRASE         122.834         185.296         6538.567         7.234         2.887           Base Demand Gas Costs         DREMAIN         537.777         195.307         543.192         158.796           DISTRIBUTION ALLOCATORS         DISTR         2.0086%         0.8514%         3.4292%         3.9918%	ALLOCATION FACTOR TABLE 24           DEMAND RELATED         4.38T         1.561         4.38T         1.289           PRODUCTION ALLOCATORS         4.337         1.551         4.38T         1.289           Design Day Remaining Demands - Sales         1.551         4.38T         1.289           LPG Production Allocator - Proof Function         2.0086%         0.8514%         3.4292%         3.9918%           LPG & LING Prod Alloc - Distribution Allocator - Proof Function         LPG & LING Prod Alloc - Distribution Allocator - Proof Function         2.0086%         0.8514%         3.4292%         3.9918%           LPG & LING Distr Pressure Support %         554         4.38T         1.289           Design Day Remaining Demands - Sales Cust         4.337         1.551         4.38T         1.289           Design Day Remaining Demands - Sales Cust         11.551         4.38T         1.289         1.289           CAS COST ALLOCATORS         Base Demand Gas Costs         DREMAIN         537.777         195.288         638.567         3.4282%         3.9918%           Distribution Allocator         DISTR         2.0086%         0.8514%         3.4282%         3.576.860         5.516.064         4.358.376         5.576.867

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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G-42 & T-42	2,632,837	17,483,688 26,651,718 44,135,406 18,083,791	27,584,660 (932,942)	17,660,291 26,920,927 44,581,218	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 49 of 322
G-41 & T-41	4,619,659 23,713,567	38.636,479 15,524,113 54,160,592 40,254,087	16,124,058 (599,945)	39,026,746 15,680,922 54,707,668	
G-40 & T-40	2,158,849 14,855,080	23,311,210 1,900,026 25,211,236 24,381,470	1,982,789 (82,763)	23,546,677 1,919,218 25,465,895	
LIGHTING	2,167	2,728 0 2,728 2,728	00	2,756 0 2,756	
R-1 & R-2	3,867,284 1,128,159	6,394,258 1,908 6,396,166 6,394,258	1,908	6,458,846 1,927 6,460,773	
R-3 & R-4	49,657,716 134,395,424	247,703,740 79,549 247,783,289 256,470,043	81,962 (2,413)	250,205,798 80,353 250,286,151	
COMPANY	80,774,205 191,688,704	365.949.048 127.549.264 493.498.312 378.169.527	(2,222,47 <i>9</i> ) 129,319,171 (1,769,907)	369,645,503 128,837,641 498,483,144	
ALLOC	EBASE EREMAIN				
ALLOCATION FACTOR TABLE CONT-25	Base Corr Remaining			16 17 Annual Therm Firm Sales Sendout 18 Annual Therm Firm Trans Sendout 19 Tot Ann Therm Firm Throughput Sendout	22 23 24 25 29 33 33 34 34 35
	ALLOC COMPANY R-3 & R-4 R-1 & R-2 LIGHTING G-40 & T-40 G-41 & T-41	ALLOCATION FACTOR TABLE CONT-25  COMMODITY RELATED  COMMODITY RELATED  Base Commodity Gas Costs  EBASE  191,688,704  R-1 & R-2  BGHTING  G-40 & T-40  G-41 & T-41  G-41 & T-41	ALLOC COMPANY R.3 & R.4 R.1 & R.2 LIGHTING G-40 & T-40 G-41 & T-41 G-42 COMMODITY RELATED  COMMODITY RELATED  Base Commodity Gas Costs  EBASE  80,774,205  Annual Therm Firm Sales  Annual Therm Firm Transportation  127,549,264  14,128,159  14,128,159  14,128,159  14,128,159  14,128,159  14,128,149  14,138,149  14,	ALLOCATION FACTOR TABLE CONT-25  COMMODITY RELATED  Base Commodity Gas Costs  EREMAIN  Target School	COMMODITY RELATED         EBASE         89.774.205         49.657.716         3.887.284         2.167         C.40.8.T.40         G.41.8.T.41         G.42.8.T.41         G.42.8.T.41         G.41.8.T.41         G.42.8.T.41         G.41.8.T.41         G.4

BRK7.xls COST OF SERVICE

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 49 of 322

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 50 of 322

6/30/2005 11:42 AM

LOW WINTER LRG HI ANNUAL	0-02 & -0-0		1,184,913		3,153,997 51,068,230 54,222,227	3,153,997 0	51,068,230	3,185,856 51,584,071 54,769,927	
LOW WINTER HIGH ANNUAL	0-07 & 1-07		4,357,592 933,008		6,665,891 18,839,377 25,505,268	6,665,891	18,839,377 0	6,733,223 19,029,674 25,762,897	
LOW WINTER MED ANNUAL	(-0-1 & 1-0-1)		8,208,799 2,525,235		13,718,907 7,650,476 21,369,383	13,718,907 0	7,650,476	13,857,482 7,727,754 21,585,236	
LOW WINTER LOW ANNUAL	00-1 <b>v</b> 00-5		2,506,976 945,632		4,446,204 797,782 5,243,986	4,446,204	797,782 0	4,491,115 805,840 5,296,955	
HIGH WINTER LRG HI ANNUAL	G-43 & 1-43		1,577,413 1,678,560		4,431,946 5,036,085 9,468,031	4,598,151 (166,205)	5,187,929 (151,844)	4,476,713 5,086,955 9,563,668	
	ALEOC		EBASE EREMAIN						
DELIVERY COMPONENTS	ALLOCATION FACTOR TABLE CONT-25	COMMODITY RELATED	Base Commodity Gas Costs Remaining Commodity Gas Costs		Annual Therm Firm Sales Annual Therm Firm Transportation Total Annual Therm Firm Throughput	Annual Base Therm - Sales Actual Weather Normalization Adj Base -Sales	Annual Base Therm - Trans Actual Weather Normalization Adj Base -Trans	Annual Therm Firm Sales Sendout Annual Therm Firm Trans Sendout Tot Ann Therm Firm Throughput Sendout	
	HIGH WINTER LOW WINTER	HIGH WINTER LOW WINTER	HIGH WINTER LOW WINTER	DELIVERY COMPONENTS         HIGH WINTER         LOW WINTER         <	PELIVERY COMPONENTS	DELIVERY COMPONENTS	DELIVERY COMPONENTS	PELIVERY COMPONENTS	HICH WINTER

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HIGH WINTER HIGH ANNUAL G-42 & T-42		4,778,556	1 271 160	382.828	143,020	4,096	9.5864%	9.5864%	653	9.5864%	9.5864%	619	4.5820%	4.5820%	9.5864%	103,390	619	617	7,432	0 700	3,331	3,777	24	300	7,406	3 3 10	) (	3,772	24	Bay S	hme	D ent A	.T.E.	-05 2-44	27 (1)
HIGH WINTER H MED ANNUAL H G-41 & T-41		6,169,869	4,385,861	1,303,439	611,185	12,352	12.2512%	12.2512%	1,971	12.2512%	%71.67.71	4,683	6.3206%	6.3206%	12.2512%	384,625 4.443	4,683	4,664	56,195	0	43,802	11,985	23	361	55,963	73 587	24	11,968	23	<del>.</del>					
HIGH WINTER LOW ANNUAL G-40 & T-40		17,876,084	2,023,106	3,005,963	747,953	9,286	6.0245%	6.0245%	2,093	6.0245%	6.0245%	16,684	5.5093%	5.5093%	6.0245%	1,117,566	16,684	16,541	200,206	0	190,/33	9,141	12	150	198,495	189 039	170	9,124	12	061					
OUTDOOR LIGHTING		0	<b>-</b>	<b>&gt;</b> C	, 0	0	0.0004%	0.0004%	0	0.0004%	0.0004%	0	0.0000%	%0000.0	0.0004%	m c	12	12	144	0	144	0	0	0	143	, T		0	0	o					
RESIDENTIAL NON-HEATING R-1 & R-2		24,984,666	2,339,184	1.277.938	151	29	1.0143%	1.0143%	1,226	1.0143%	1.0143%	33,089	6.5521%	6.5521%	1.0143%	1,185,903 33,089	31,413	33,050	376,961	23,554	353,282	8 6	0	0	396,597	47,645	940,040	59	0	0					
RESIDENTIAL HEATING R-3 & R-4		166,042,757	15,188,303	8 297 644	26,212	439	52.9058%	52,9058% 52,9058%	20,434	52.9058%	52.9058%	222.208	64.3422%	64.3422%	52.9058%	8,185,483 220 467	222,208	219,642	2,666,494	0	2,665,888	428	12	0	2,635,699	0 0 0 0 0 0 0 0 0	2,000,000	427	12	0					
TOTAL COMPANY		228,746,364	24,915,976	13.612.047	2,065,320	38,807	100.0000%	100.000%	27,736	100.0000%	100.000%	283,675	100,0000%	100.0000%	100.0000%	11,447,296	281.032	279,901	3,372,382	23,554	3,309,471	36.729	80	2,064	3,358,808	47,645	4,5,7,5,5	36,667	80	2,060					
ALLOC		CUST380	CUST381	CUST382	CUSTDEP	CUSTTR	CUST3860	CUST3863	CUST487	CUST488	CUS1882	CUST903	CUST912	CUST913	CUST879	CUST903C																			
DELIVERY COMPONENTS ALLOCATION FACTOR TABLE CONT-26	CUSTOMER RELATED		-	3 Acct 382 Meter Installations 4 Acct 383 Gas Benilators				8 Acct 386.2 Cascade Diamond bollers 9 Acct 386.3 Conversion Burners				13 Acct 902 Meter Reading Expense 14 Acct 903-Cust Records & Collection Exp		16 Acct 913-Advertising Expense		18 Acct 903 Collections Expense					25 Sales Bills			<ul><li>29 Daily Metered Transportation Bills</li><li>30</li></ul>		32 Bi-Monthly Sales Customers	34 Farm Sales Customers			37 Daily Metered Transportation Customers					

LOW WINTER LRG HI ANNUAL G-53 & T-53 892,892 176,519 320,211 96,435 BRK7.xls COST OF SERVICE

30-Jun-05

LOW WINTER HIGH ANNUAL G-52 & T-52	1,922,133 382,655 694,148 209,051 70,155 1,889 3,9918% 3,9918% 3,9918% 663 663 644 42,482 42,	
LOW WINTER MED ANNUAL G-51 & T-51	2,310,269 1,022,284 1,854,457 558,492 2,492 3,4292% 3,4292% 3,4292% 3,4292% 1,766 2,4771% 2,4771% 2,4771% 2,1073 2,0,055 2,0,055 15,149 15,149 15,149 15,149 15,149 15,149	
LOW WINTER LOW ANNUAL G-50 & T-50	3,565,851 647,602 353,46 1,174,602 353,46 1,0,898 4,054 0,8514% 0,8514% 3,326 3,326 3,300 39,908 39,908 39,595 35,483 4,032 0 35,483 4,032 0 35,483 58	
HIGH WINTER LRG HI ANNUAL G-43 & T-43	203.287 49.813 99.363 29.363 27,214 79.450 1.20 2.0086% 2.0086% 2.0086% 2.0086% 2.0086% 2.0086% 111 1.5 1.5 0.9620% 0.9620% 0.9620% 0.153 161 181 181 0 0 0 0 0 120 120 0 0 0 0 120 0 0 0 120 0 0 120 0 0 0	
ALLOC	CUST380 CUST381 CUST383 CUST3860 CUST786 CUST7862 CUST7862 CUST7863 CUST7873	
DELIVERY COMPONENTS ALLOCATION FACTOR TABLE CONT-26	Acct 380 Gas Services Acct 381 Gas Meters Acct 381 Gas Meters Acct 382 Gas Regulators Customer Deposits Transportation Customers Acct 386.0 Gas Water Heaters Acct 386.0 Gas Water Heaters Acct 386.2 Cascade Diamond Boilers Acct 386.2 Cascade Diamond Boilers Acct 386.3 Conversion Burners Acct 386.3 Conversion Burners Acct 386.3 Conversion Burners Acct 386.3 Conversion Burners Acct 386.4 Conversion Burners Acct 386.5 Conversion Burners Acct 386.5 Conversion Burners Acct 386.6 Gas Water Reading Expense Acct 391.4 Conversion Burners Acct 902 Meter Reading Expense Acct 903 Collections Expense Acct 903 Collections Expense Acct 903 Collections Expense Acct 903 Collections Expense Average Number of Customers Farm Sales Bills Farm Sales Bills Sales Bills Farm Sales Bills Farm Transportation Bills Farm Transportation Bills Farm Sales Customers Farm Transportation Customers	
	+ 2 8 4 8 9 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

799 0 0 0 0 0 0 708

706 7.9364% 7.9364% 7.9364% 7.9364% 7.9364% 67 5.5055% 5.5055% 7.9364 67 66

AG-22-44	
Attachment	

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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30-Jun-05

8,210,675 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 53 of 322
12,803,042 0 0 0 0 0 0 12,803,042 0 0 0 0	
11,278,538 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
10,855,556 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
100,277,501	
331,383,347 16,939,304 2,692 33,596,561 48,258,681 23,85,277 16,274,168 9,370,069 8,564,507 33,596,561 48,258,681 23,892,250 5,437,151 6,356,277 16,274,168 9,370,069 8,564,507 16,274,168 9,370,069 8,564,507	
C904R3 C904R1 C904C1 C904R41 C904R42 C904R42 C904R43 C904R55 C904R52 C904R53 C904R53 C487R40 C487R40 C487R40 C487R45 C487R51 C487R51 C487R52 C487R52 C487R52 C487R52 C487R53	
Residential Heating Rate R-3 & R-4  Residential Non-Heating Rate R-1 & R-2  Outdoor Lighting  High Winter Low Annual Rate G41 & T41  High Winter Med Annual Rate G42 & T42  High Winter Low Annual Rate G50 & T50  Low Winter Low Annual Rate G50 & T51  Low Winter High Annual Rate G52 & T52  Low Winter High Annual Rate G52 & T52  Low Winter High Annual Rate G53 & T53  Low Winter High Annual Rate G53 & T40  High Winter Med Annual Rate G53 & T40  High Winter Low Annual Rate G50 & T40  High Winter Low Annual Rate G50 & T50  Low Winter Large Annual Rate G50 & T50  Low Winter Large Annual Rate G53 & T53  Low Winter High Annual Rate G53 & T53  Low Winter Med Annual Rate G53 & T53  Low Winter High Annual Rate G53 & T53  22  Low Winter High Annual Rate G53 & T53  24  25  26  27	33 33 33
	Residential Heating Rate R-3 & R-4 (2004R3)         C904R3 (31,383,347 (10,277,501 (10,855,586 (10,955,586

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 54 of 322

11:19 AM
30-Jun-05

ALLOC G43 & T-43 G-50 & T-50 G-51 & T-51 G-52 & T-52 G-52 G-52 G-52 G-52 G-52 G-52 G-52 G	ALLOC G-43 & T-43 G-50 & T-50 G-51 & T-51 G-52 & T-52 G-53 & T-53 G-53 G-53 G-53 G-53 G-53 G-53 G-53 G			HIGH WINTER	LOW WINTER	LOW WINTER MED ANNUAL	LOW WINTER HIGH ANNUAL	LOW WINTER LRG HI ANNUAL
C904R3 C904R1 C904R1 C904R1 C904R4 C904R42 C904R42 C904R42 C904R42 C904R42 C904R42 C904R43 C904R53 C906R53 C904R53 C904R54 C90	C904R3 C904R3 C904R3 C904R3 C904R41 C904R42 C904R42 C904R42 C904R42 C904R53 C9	ALLOCATION FACTOR TABLE CONT-27	ALLOC	G-43 & T-43	G-50 & T-50	G-51 & T-51	G-52 & T-52	G-53 & T-53
C904R3 C904R1 C904R1 C904R1 C904R4 C904R42 C904R42 C904R42 C904R42 C904R42 C904R43 C904R43 C904R42 C904R43 C90	C904R3 C904R1 C904R1 C904R1 C904R4 C904R42 C904R42 C904R42 C904R42 C904R53 C904R54 C904R54 C904R54 C904R54 C904R54 C904R54 C904R54 C904R54 C904R54 C90	INTERNALLY DEVELOPED						
2-2         C904R3         0         0         0           C904R1         0         0         0         0           C904R40         0         0         0         0           T41         C904R40         0         0         0           T42         C904R30         0         0         0           T43         C904R42         0         0         0           T43         C904R32         0         0         0           T55         C904R42         0         0         0           T55         C904R53         0         4.184,599         0           T55         C904R53         0         0         0           T40         C497R42         0         0         0           T41         C437R42         0         0         0         0           T43         C437R42         0         0         0         0         0           T43         C437R42         0         0         0         0         0         0           T55         C487R43         0         0         0         0         0         0         0         0         0	C904R3 C904R1 C904R4 C904R40 C904R41 C904R42 C904R42 C904R42 C904R42 C904R43 C904R44 C487R40 C487R40 C487R40 C487R40 C487R40 C487R53 C487R51 C487R52 C487R53 C	UNCOLLECTIBLE ACCOUNTS						
C904R1     0     0     0       C904R1     0     0     0       C904R41     0     0     0       C904R42     0     0     0       C904R53     0     0     0       C904R53     0     0     0       C904R53     0     0     0       C487R41     0     0     0       C487R42     0     0     0       C487R42     0     0     0       C487R43     1,447,096     0     0       C487R53     0     0     0       C5755.81     0     0     0       C5755.81     0     0     0       C5755.81     0     0     0	C904R1     0     0     0       C904R41     0     0     0       C904R42     0     0     0       C904R43     0     0     0       C904R53     0     0     0       C904R53     0     0     0       C487R40     0     0     0       C487R42     0     0     0       C487R43     1,447,096     0     0       C487R50     0     0     0       C487R52     0     0     0       C487R53     0     0     0       C487R53     0     0     0       C487R53     0     0     0       C487R53     0     0     0       C5755.81	ential Heating Rate R-3 & R-4	C904R3	0	0	0	0	0
C904OL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C904R40 C904R40 C904R41 C904R42 C904R42 C904R43 C904R43 C904R53 C904R53 C904R53 C904R53 C904R53 C904R53 C904R53 C904R53 C487R41 C487R52 C487R53 C487R53 C904R40 C904R41 C487R53 C487R53 C904R41 C904R42 C487R53 C487R53 C904R41 C904R42 C904R43 C487R53 C487R53 C904R41 C904R43 C487R53 C487R53 C904R41 C904R43 C904R43 C487R53 C487R53 C904R43 C904R4	ential Non-Heating Rate R-1 & R-2	C904R1	0	0	0	0	0
C904R40 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C904R40 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	or Lighting	C9040L	0	0	0	0	0
C904R41 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C904R41 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Vinter Low Annual Rate G40 & T40	C904R40	0	0	0	0	0
C904R42     0     0     0       C904R42     0     0     0       C904R43     1,447,096     0     0       C904R51     0     2,343,956     0     0       C904R52     0     0     0     0       C904R53     0     0     0     0     5,755,81       C904R53     0     0     0     0     0       C487R41     0     0     0     0     0       C487R43     1,447,096     0     0     0     0       C487R50     0     0     0     0     0       C487R51     0     0     0     0     0       C487R52     0     0     0     0     0       C487R53     0     0     0     0     0       C575581     0     0     0     0     0     0	C904R42     0     0     0       C904R43     1,447,096     0     0     0       C904R50     0     0     0     0       C904R51     0     0     0     0       C904R52     0     0     0     0       C904R53     0     0     0     0       C904R53     0     0     0     0       C487R40     0     0     0     0       C487R41     0     0     0     0       C487R43     1,447,096     0     0     0       C487R50     0     0     0     0       C487R51     0     0     0     0       C487R52     0     0     0     0       C487R53     0     0     0     0       C487R52     0     0     0     0       C487R53     0     0     0     0       C487R53     0     0     0     0       C575581     0     0     0     0	Vinter Med Annual Rate G41 & T41	C904R41	0	0	0	0	0
C904R43     1,447,096     0     0     0       C904R50     0     0     0     0       C904R50     0     0     0     0       C904R53     0     0     0     0     0       C904R53     0     0     0     0     0       C487R40     0     0     0     0     0       C487R41     0     0     0     0     0       C487R42     0     0     0     0     0       C487R42     0     0     0     0     0       C487R50     0     0     0     0     0       C487R51     0     0     0     0     0       C487R52     0     0     0     0     0       C487R53     0     0     0     0     0       C487R53     0     0     0     0     0       C487R53     0     0     0     0     0       C5755.81     0     0     0     0     0	C904R43     1,447,096     0     0       C904R50     0     0     0       C904R51     0     0     0       C904R52     0     0     0       C904R53     0     0     0       C904R53     0     0     0       C487R41     0     0     0       C487R42     0     0     0       C487R43     1,447,096     0     0       C487R50     0     0     0       C487R51     0     0     0       C487R52     0     4,184,599     0       C487R53     0     0     0       C487R53     0     3,531,742     5,755,81	Vinter High Annual Rate G42 & T42	C904R42	0	0	0	Ž	0
C904R50       0       2,343,956       0	C904R50 C904R57 C904R53 C904R53 C904R53 C904R53 C904R53 C487R40 C487R40 C487R40 C487R54 C487R52 C487R55 C487R5	Vint Large Annual Rate G43 & T43	C904R43	1,447,096	0	0	0	0
C904F51 0 4,184,599 0 5,755,811 C904F52 0 0 4,184,599 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C904R51 0 0 4,184,599 0 0 6,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	/inter Low Annual Rate G50 & T50	C904R50	0	2,343,956	0	0	0
C904R52         0         0         3,531,742         5,755,81           C904R53         0         0         0         0         5,755,81           C904R53         0         0         0         0         0         0           C487R41         0	C904R52 0 0 0 3,531,742 C904R53 0 0 0 0 3,531,742 C487R40 0 0 0 0 0 C487R41 0 0 0 0 C487R43 1,447,096 0 0 0 C487R50 0 0 0 0 C487R51 0 0 0 0 C487R52 0 0 0 0 C487R53 0 0 5,755,81	/inter Med Annual Rate G51 & T51	C904T51	0	0	4,184,599	0	0
C487R40 0 0 0 5,755,81 C487R40 0 0 0 0 0 5,755,81 C487R41 0 0 0 0 0 0 C487R42 0 0 0 0 0 C487R42 0 0 0 0 0 C487R43 1,447,096 0 0 0 0 C487R50 0 0 0 0 0 C487R51 0 0 0 0 C487R52 0 0 3,531,742 C487R53 0 0 5,755,81	C904R53       0       0       0       5,755,81         C487R40       0       0       0       0         C487R41       0       0       0       0         C487R42       0       0       0       0         C487R42       0       0       0       0         C487R43       0       0       0       0         C4877F5       0       0       0       0         C487F5       0       0       0       0         C487R52       0       0       3,531,742       0         C487R53       0       0       0       5,755,81	Jinter High Annual Rate G52 & T52	C904R52	0	0	0	3,531,742	0
C487R40     0     0     0       C487R41     0     0     0       C487R42     0     0     0       C487R43     1,447,096     0     0       C487R50     0     0     0       C487R51     0     4,184,599     0       C487R52     0     0     3,531,742       C487R53     0     0     5,755,81	C487R40     0     0     0       C487R41     0     0     0       C487R42     0     0     0       C487R43     1,447,096     0     0     0       C487R50     0     0     0     0       C487R52     0     0     4,184,599     0       C487R53     0     0     3,531,742       C487R53     0     0     5,755,81	/int Large Annual Rate G53 & T53	C904R53	0	0	0	0	5,755,813
C487R40     0     0     0       C487R41     0     0     0       C487R42     0     0     0       C487R42     0     0     0       C487R43     0     0     0       C487R50     0     0     0       C487R51     0     4,184,599     0       C487R52     0     3,531,742     5,755,81       C487R53     0     0     5,755,81	C487R40     0     0     0       C487R41     0     0     0       C487R42     0     0     0       C487R42     0     0     0       C487R43     1,447,096     0     0     0       C487R50     0     0     0     0       C487R51     0     4,184,599     0     0       C487R52     0     3,531,742     5,755,81       C487R53     0     0     3,531,742     5,755,81	LATE PAYMENT CHARGES						
C487R41 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C487R41 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Vinter Low Annual Rate G40 & T40	C487R40	0	0	0	0	0
C487R42 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C487R42 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Vinter Med Annual Rate G41 & T41	C487R41	0	0	0	0	0
C487R43 1,447,096 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C487R43 1,447,096 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Vinter High Annual Rate G42 & T42	C487R42	0	0	0	0	0
C487R50 0 2,343,956 0 0 0 0 0 C487F51 0 0 4,184,599 0 0 0 C487R52 0 0 3,531,742 0 5,755,81	C487R50 0 2,343,956 0 0 0 0 0 C487T51 0 0 4,184,599 0 0 0 0 C487R52 0 0 3,531,742 0 5,755,81	Vint Large Annual Rate G43 & T43	C487R43	1,447,096	0	0	0	0
C487R51 0 0 4,184,599 0 0 C487R52 0 0 3,531,742 0 5,755,81	C487R51 0 0 4,184,599 0 0 C487R52 0 0 0 4,184,599 0 0 C487R53 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Inter Low Annual Rate G50 & T50	C487R50	0	2,343,956	0	0	0
C487R52 0 0 0 3,531,742 C487R53 0 0 0 0 5,755,81	C487R52 0 0 0 3,531,742 C487R53 0 0 0 0 3,531,742 0 5,755,81	Vinter Med Annual Rate G51 & T51	C487T51	0	0	4,184,599	0	0
C487R53 0 0 0 0 0	C487R53 0 0 0 0 0	Vinter High Annual Rate G52 & T52	C487R52	0	0	0	3,531,742	0
		Vint Large Annual Rate G53 & T53	C487R53	0	0	0	0	5,755,813

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 55 of 322

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DELIVERY COMPONENTS		
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TOTAL COMPANY INPUT			Page 23 , Line 10, Col 2	Page 23, Line 10, Col 3	Page 23 , Line 10, Col 4	Page 23 , Line 10, Col 5	Page 23, Line 10, Col 6	Page 23 , Line 10, Col 7	Page 23 , Line 10, Col 8	Page 23, Line 10, Col 9	Page 23, Line 10, Col 10	Page 23 , Line 10, Col 11	Page 23 , Line 10, Col 12			
ALLOC			C904R3	C904R1	C9040L	C904R40	C904R41	C904R42	C904R43	C904R50	C904T51	C904R52	C904R53			
ALLOCATION FACTOR TABLE CONT-27	INTERNALLY DEVELOPED	UNCOLLECTIBLE ACCOUNTS	1 Residential Heating Rate R-3 & R-4	2 Residential Non-Heating Rate R-1 & R-2	3 Outdoor Lighting	4 High Winter Low Annual Rate G40 & T40	5 High Winter Med Annual Rate G41 & T41	6 High Winter High Annual Rate G42 & T42	7 High Wint Large Annual Rate G43 & T43	8 Low Winter Low Annual Rate G50 & T50	9 Low Winter Med Annual Rate G51 & T51	10 Low Winter High Annual Rate G52 & T52	1 Low Wint Large Annual Rate G53 & T53		3 LATE PAYMENT CHARGES	
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AYMENT CHARGES		
Annual Rate G40 & T40	C487R40	Page 23 , Line 10, Col 5
Annual Rate G41 & T41	C487R41	Page 23 , Line 10, Col 6
n Annual Rate G42 & T42	C487R42	Page 23, Line 10, Col 7
Annual Rate G43 & T43	C487R43	Page 23 , Line 10, Col 8
Annual Rate G50 & T50	C487R50	Page 23 , Line 10, Col 9
Annual Rate G51 & T51	C487T51	Page 23, Line 10, Col 10
Annual Rate G52 & T52	C487R52	Page 23, Line 10, Col 11
Annual Rate G53 & T53	C487R53	Page 23 , Line 10, Col 12

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HIGH WINTER HIGH ANNUAL G-42 & T-42	Bay State Gas Company  1,526,086  1,64,950  1,64,950  1,64,950  1,64,950  1,64,950  1,74,107  2,20,746  2,20,746  2,20,746  2,747  1,371  2,100  2,20,736  2
HIGH WINTER MED ANNUAL G-41 & T-41	63,732,988 2,383,384 2,582,102 8,004 152,046 28,705 540,575 9,685 37,952,606 40,094 1,513,655 6,169,869 1,721,708 69,801 969,800 210,665 4,285 1,503,439 1,721,708 62,612 62,612 62,612 62,614 4,817 7,474 1,676 4,1
HIGH WINTER LOW ANNUAL G-40 & T-40	56,799,344 1,876,254 46,399 2,310,580 40,817 74,768 14,116 265,825 4,768 127,032 17,876,084 2,023,106 3,629 1,105,260 846,639 34,324 472,025 1,05,260 846,639 34,324 472,025 1,05,260 846,639 34,324 472,025 1,05,260 1,23,499 27,162 494,567 1,685 27,162 494,567 1,685 27,162 494,567 1,685 27,162 494,567 1,685 27,162 494,567 1,685 27,162 494,567 1,685 27,162 494,567 1,685 2,369 27,162 494,567 1,685 2,369 27,162 494,567 1,685 2,369 27,162 2,369 27,162 3,455 3,675 824 2,858
OUTDOOR LIGHTING	1,5,1 1,5,6 1,5,6 1,5,7 1,
RESIDENTIAL NON-HEATING R-1 & R-2	40,367,793 1,541,812 36,871 1,898,719 6,872 12,377 44,757 44,757 21,388 3,142,289 3,320 125,323 142,549 142,549 142,549 142,549 142,549 142,549 142,549 142,549 142,549 142,549 142,640 1779 1772 101,485 1385 1385 1385 1399 1399 1399 1399 1399 1399 1399 139
RESIDENTIAL HEATING R-3 & R-4	446,150,209 16,452,928 407,503 20,261,541 358,447 656,599 123,960 2,334,429 14,185,314 14,185,314 14,185,301 15,188,301 27,552,090 8,297,45 26,692,775 1,385,158 2,963 2,38,181 4,386,325 6,692,775 1,385,158 2,363 2,363 1,4780 2,963 2,363 1,4780 2,963 2,363 1,4780 2,963 2,363 1,4780 2,963 1,682,775 1,385,158 2,363 1,485,158 2,363 1,485,158 2,363 1,485,158 2,363 1,485,158 2,563 1,685 2,663
TOTAL	754.551,098 28,074,804 689,189 34,573,711 2,368,951 4,394,415 15,428,067 79,051 79,051 2,108,612 309,786,822 327,265 12,355,156 228,746,364 24,915,974 14,053,382 14,053,382 14,053,382 14,053,382 14,053,382 14,053,382 14,053,382 14,053,382 14,053,382 14,053,382 14,053,382 14,053,382 14,053,382 14,053,382 14,053,382 14,420,359 20,028 213,302 47,828 1107,427 541,175 541,175 541,175 56,356
ALLOC	PLANT LABOR PLT301 PLT303 PLT305 PLT311 PLT320 PLT320 PLT320 PLT320 PLT380 PLT380 PLT380 PLT383 PLT380 PLT383 PLT380 PLT380 PLT383 PLT380 PLT3
DELIVERY COMPONENTS INTERNALLY DEVELOPED-28	1 Total Gas Plant In Service 2 Sum of Allocated Labor Expense 3 Acct 301 Organization 4 Acct 303 Misc. Intangible Plant 5 Acct 311 L.P. Gas Equipment 7 Acct 320 Other Equipment 8 Acct 321 L.N.G. Equipment 9 Acct 320 Other Equipment 12 Acct 368 Compressor Station Equipment 13 Acct 369 Meas. & Reg. Station Equipment 14 Acct 360 Gas Mains 15 Acct 380 Gas Meters 16 Acct 380 Gas Meters 17 Acct 380 Gas Meters 18 Acct 380 Gas Meters 19 Acct 380 Gas Water Heaters 10 Acct 380 Gas Water Heaters 10 Acct 380 Gas Water Heaters 11 Acct 380 Gas Water Heaters 12 Acct 380 Gas Water Heaters 13 Acct 380 Other Equipment 14 Acct 380 Structures & Improvements 15 Acct 380 Structures & Improvements 16 Acct 380 Structures & Improvements 17 Acct 380 Structures & Improvements 18 Acct 390 Structures & Improvement 18 Acct 391 Office Equipment 19 Acct 395 Power Operated Equipment 20 Acct 395 Power Operated Equipment 21 Acct 395 Power Operated Equipment 22 Acct 395 Power Operated Equipment 23 Acct 397 Communication Equipment 24 Acct 395 Power Operated Equipment 25 Acct 395 Power Operated Equipment 26 Acct 396 Power Operated Equipment 27 Acct 397 Communication Equipment 28 Acct 713-LPG Gas Expenses 29 Acct 713-Handling Expense 30 Acct 714-Maintenance of Struct & Improv 31 LPG Gas Prod Labor Accts 717 to 735 32 Acct 713-Handling Expense 33 Acct 713-Handling Expense 34 LPG Gas Prod Labor Accts 754 to 777 39 Acct 757-Vaporization Expense

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 57 of 322

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

LOW WINTER LRG HI ANNUAL G-53 & T-53	32,439,258 1,126,110 2,86,140 1,386,174 18,595 360,188 6,274 167,348 25,973 980,555 890,505 10,055 10
LOW WINTER HIGH ANNUAL G-52 & T-52	19,025,787 15,743 17,378 10,654 27,045 27,045 49,541 27,045 49,541 13,064 49,541 13,064 49,541 13,064 49,541 13,064 13,064 13,064 14,171 12,038 17,103
LOW WINTER MED ANNUAL G-51 & T-51	19,894,459 18,883 18,883 23,234 42,559 8,035 11,223 11,223 11,023,268 1,023,268 1,023,268 1,023,268 1,023,268 1,023,268 1,023,269 1,023,269 1,382
LOW WINTER LOW ANNUAL G-60 & T-50	9,757,141 384,694 8,912 473,745 57,745 10,566 11,995 37,566 12,937,410 2,786 105,187 3,565,851 64,750 111,645 4,344 4,344 100,080 116,402 335 335 101,402 346 346 4,344 4,344 4,344 4,344 4,344 4,344 101,402 35,569 101,402 35,569 116 29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20
HIGH WINTER LRG HI ANNUAL G-43 & T-43	8,205,107 284,926 7,494 350,882 13,609 24,929 4,706 88,630 1,588 42,356 6,574 203,287 49,813 90,363 27,214 282,283 11,444 115,403 27,214 282,283 27,214 27,214 282,283 283,283 283
ALLOC	PLANT LABOR PLT301 PLT303 PLT303 PLT305 PLT311 PLT320 PLT311 PLT320 PLT366 PLT366 PLT366 PLT366 PLT366 PLT366 PLT369 PLT381 PLT381 PLT382 PLT383 PLT383 PLT383 PLT394 PLT394 PLT394 PLT394 PLT395 PLT396 PLT396 PLT396 PLT397 PLT397 PLT397 PLT397 PLT397 PLT398 PLT397 PLT398 PLT397 PLT396 PLT397 PLT397 PLT396 PLT397 PLT397 PLT397 PLT396 PLT397 PLT397 PLT396 PLT397 PLT396 PLT397 PLT3
DELIVERY COMPONENTS INTERNALLY DEVELOPED-28	Total Gas Plant In Service  2 Sum of Allocated Labor Expense 3 Act 300 Organization 4 Act 303 Misc. Intangible Plant 5 Act 305 Structures & Improvements 6 Act 311 L.P. Gas Equipment 7 Act 320 Other Equipment 8 Act 321 L.N.G. Equipment 9 Act 365 Structures & Improvements 10 Act 366 Structures & Improvements 11 Act 360 Gas Mains 12 Act 369 Meas. & Reg. Station Equipment 13 Act 369 Meas. & Reg. Station Equipment 14 Act 380 Gas Meter Installations 15 Act 381 Gas Meters 16 Act 386 Conversion Burners 17 Act 386 Cascade Diamond Boilers 18 Act 386 Carcade Diamond Boilers 19 Act 387 Other Equipment 20 Act 380 Structures & Improvements 21 Act 380 Structures & Improvements 22 Act 390 Structures & Improvements 23 Act 390 Structures & Improvement 24 Act 391 Office Equipment 25 Act 392 Transportation Equipment 26 Act 395 Communication Equipment 27 Act 396 Power Operated Equipment 28 Act 397 Communication Equipment 29 Act 397 Transportation Equipment 29 Act 397 Romunication Equipment 31 LPG Gas Prod Labor Acts 717 to 735 32 Act 719-Handling Expense 33 Act 719-Handling Expense 34 Act 714-Maintenance of Struct & Improv 37 Act 742-Maintenance of Struct & Improv 38 LNG Gas Prod Labor Acts 754 to 777 39 Act 757-Vaporization Expense

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 58 of 322

## DELIVERY COMPONENTS

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TOTAL COMPANY INPUT	Page 4 , Line 18 Page 22 , Line 21	Page 2 , Line 3	7.	ζ.	∽	Page 2, Line 18	Fage 2 , Lifte 19 Page 3 , Line 2	Page 3 , Line 3	Page 3 , Line 11	3,1	3, Line 1	د ر	—. ش	00	m	~		<u> </u>	<u>~</u>	~.	-		Page 4, Line 7	Page 4, Line 8		Fage 4, Line 10	Page 4, Line 16	Pg 19, Ln 2 to 4	Page 9, Line 2	Page 9, Line 3	Page 9 , Line 6	Pg 19, Ln 9 to 10	Page 9 , Line 9	Page 9 , Line 10	Pg 19, Ln 14 to 18	Page 9 , Line 14	Page 9, Line 15
ALLOC	PLANT LABOR	PLT301	PLT303	PLT305	PLT311	PL1320	PLT365	PLT366	PLT367	PLT368	PL T369	PL T380	PLT381	PLT382	PLT383	Pt.T3860	PLT3862	PLT3863	PLT387	PLT379	PLT390	PLT391	PLT392	PL 1393	PL 1394	Pt.1396	PLT398	LABPO	EXP717	EXP719	EXP735	LABPM	EXP741	EXP742	LABLO	EXP754	EXP757
INTERNALLY DEVELOPED-28	Total Gas Plant In Service     Sum of Allocated Labor Expense	3 Acct 301 Organization	4 Acct 303 Misc. Intangible Plant	Acct 305 \$	311	Acct 320	8 Acct 321 L.N.G. Equipment 9 Acct 365 Right of Way	Acct 366	367	Acct 368	Acct 369	Acct 380		6 Acct 382 Meter Installations	7 Acct 383 Gas Regulators	8 Acct 386 Gas Water Heaters	9 Acct 386 Cascade Diamond Boilers	20 Acct 386 Conversion Burners	1 Acct 387 Other Equipment	2 Acct 379 Other Equipment	Acct 390	Acct 391	Acct	26 Acct 393 Stores Equipment	Acct	28 Acct 396 Power Operated Equipment	Acc	P. B.		_	34 Acct 735-Miscellaneous Production Exp	35 LPG Gas Prod Labor Accts 741 to 742		37 Acct 742-Maintenance of Production Eq	38 LNG Gas Prod Labor Accts 754 to 777		40 Acct 757-Vaporization Expense

HIGH WINTER HIGH ANNUAL G-42 & T-42	25,073 3,020 3,020 3,020 3,020 13,020 13,030 12,031 12,031 13,031
HIGH WINTER MED ANNUAL G-41 & T-41	922,592 22,592 32,043 3,860 3,880 9,194 2,993,314 818,788 1,048,766 0,024 725,715 60,024 7,544 38,798 38,798 38,798 41,781 41,78
HIGH WINTER LOW ANNUAL G-40 & T-40	453 11,109 15,757 1,898 10,234 707,331 707,331 707,331 24,428 24,428 255,420 40,341 3,740 283,708 283,708 283,708 3,740 3,740 283,708 35,428 35,428 37,429 40,341 41,749 41,749 41,749 41,749 577,292 6,902 8,902 8,902 8,902 8,902 11,603 11,486 251,229 (245,105) 1,480,712 1,011,617 44,402
OUTDOOR LIGHTING	0 + + 0 0 0 9 9 9 0 0 + 2 8 0 5 5 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RESIDENTIAL NON-HEATING R-1 & R-2	76 1,870 2,653 320 320 67,792 67,792 67,792 67,792 60,086 4,113 196,617 528,895 60,086 28,941 625 60,086 28,941 416 38,440 40,963 40,963 40,963 40,963 40,963 40,963 40,963 40,963 40,963 40,963 40,963 726,172 8,044 10,460 5,485 107,978 8,044 107,978 107,9
RESIDENTIAL HEATING R-3 & R-4	3,980 97,560 138,373 16,668 1,673 39,703 20,669,043 3,535,866 5,827,173 76,122 214,525 2,306,379 3,434,111 3,135,941 3,434,111 3,135,941 1,224,728 265,974 265,974 265,974 265,974 265,974 265,974 265,974 265,974 265,974 265,974 27,705 397,443 997,443 997,443 102,717 112,122 4,095,965 5,417,854 80,137 116,122 4,095,965 5,417,854 80,137 116,122 4,095,965 5,417,854 80,137 116,122 4,095,965 5,417,854 80,137 116,122 4,095,965 5,417,854 80,137 116,588,903 8,924,615 394,776
TOTAL	26.304 26.4763 914.499 110,159 110,160 23.368,270 10,090,604 143,882 405,485 3,764,532 5,633,560 5,923,626 61,576 4,225,605 41,025 3,789,693 7,500,932 125,024 11,745,741 3,909,418 (3,814,124) 24,687,388 0,290,418 (3,814,124) 24,687,388 0,290,418 (3,814,124) 24,687,388
ALLOC	EXP759 EXP777 EXP777 EXP777 EXP777 EXP781 EXP781 EXP782 INTPLT PRODPLT LABDO EXP851 EXP851 EXP852 EXP853 EXP866 EXP888 EXP889 EXP889 EXP889 EXP889 EXP889 EXP899 EXP992 EXP992 EXP9926 EXP9926 EXP922 EXP922 EXP926
DELIVERY COMPONENTS INTERNALLY DEVELOPED CONT-29	Acct 775-Miscellaneous Production Exp Acct 775-Miscellaneous Production Exp Acct 777-Lease Expense 4 LNG Gas Prod Labor Accts 781 to 782 5 Acct 781-Maintenance of Struct & Improv 6 Acct 781-Maintenance of Struct & Improv 6 Acct 782-Maintenance of Struct & Improv 6 Acct 782-Maintenance of Production Eq. 7 Total Intangible Plant 8 Total Production Plant 9 Trans & Dist Op Labor Accts 851 to 881 10 Acct 857-Mescuring & Regul Stat Exp 12 Acct 873-Mere & House Regulator Exp 13 Acct 874-Mains and Services Exp 14 Acct 875-Mescuring & Regul Stat Exp 15 Acct 876-Mere & House Regulator Exp 15 Acct 876-Mere & House Regulation Exp 16 Acct 880-Other Expenses 17 Acct 881-Rents 18 Trans & Distr Maint Lab Accts 851 to 881 19 Acct 889-Maintenance of Mains 21 Acct 889-Maintenance of Struct & Improv 20 Acct 889-Maint of Meters and House Regul 22 Acct 899-Maintenance of Other Equip 24 Acct 893-Maintenance of Other Equip 25 Customer Accts Labor Accts 912 to 916 31 Acct 912-Demonstrating & Selling Exp 31 Acct 912-Demonstrating & Selling Exp 32 Acct 912-Office Supplies & Expenses 33 Acct 912-Office Supplies & Expenses 34 Acct 912-Office Supplies & Expenses 35 Acct 912-Office Supplies & Expenses 37 Acct 912-Office Supplies & Expenses 38 Acct 912-Office Supplies & Expenses 39 Acct 912-Office Supplies & Expenses 59 Acct 912-Office Supplies & Expense

Page 29-1

95,219 558,050 22,660

LOW WINTER LRG HI ANNUAL G-53 & T-53

LOW WINTER HIGH ANNUAL G-52 & T-52

LOW WINTER MED ANNUAL G-51 & T-51

597 14,635 20,757 2,500 251

5,956

300 7,361 10,440 1,258 1,258 2,996 827,009 2266,784 277,486

258 6,324 8,969 1,080 108 2,573 965,039 965,039 363,072

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	DELIVERY COMPONENTS		HIGH WINTER LRG HI ANNUAL	LOW WINTER LOW ANNUAL
		ALLOC	G-43 & T-43	G-50 & T-50
	INTERNALLY DEVELOPED CONT-29			
τ-	Acct 759-Handling Expense	EXP759	151	64
8	Acct 775-Miscellaneous Production Exp	EXP775	3,704	1,570
ന	Acct 777-Lease Expense	EXP777	5,254	2,227
4	LNG Gas Prod Labor Accts 781 to 782	LABLM	633	202
S	Acct 781-Maintenance of Struct & Improv	EXP781	64	17
9	Acct 782-Maintenance of Production Eq	EXP/82	1,507	793 664
~ 1	Total Intangible Plant	IN IPL	358,375 424,244	462,637
00 C	Total Production Plant	FRODEL	134,244	162 290
æ (	frans & Listr Op Labor Accts 631 to 661	EYD851	20.00	0
⊋ ‡	Accionitation & Load Dispated	EXP852	0880	1,225
- 6	Act obstacling & Recit Stat Exp	EXP857	8.145	3,452
, ¢.	Acct 874-Mains and Services Exp	EXP874	44,919	43,363
4	Acct 878-Meter & House Regulator Exp	EXP878	11,263	146,403
ű	Acct 879-Customer Installations Exp	EXP879	118,985	50,432
16	Acct 880-Other Expenses	EXP880	6,811	8,958
11	Acct 881-Rents	EXP881	1,23/	526 526 526 526
φ.	Trans & Distr Maint Lab Accts 851 to 881	LABUM	55,003	349
<u></u>	Acct 886-Maintenance of Struct & Improv	EVD887	76 122	32.264
? ?	Acct 887-Maintenance of Maints	100 LX	٠٥, ١٤٤	0.000
7 %	Acct 868-Maint of Complessor Station Eq.	EXP889	4 613	1,955
3 5	Acct 000-maint of micas a stog state of the	EXP892	1,499	26,302
24	Acct 893-Mnt of Meters and House Regul	EXP893	872	11,339
25	Acct 894-Maintenance of Other Equip	EXP894	8,107	3,436
26	Customer Accts Labor Accts 902 to 903	LABCA	14,334	83,385
27	Acct 902-Meter Reading Expenses	EXP902	375	8,737
28	Acct 903-Cust Records & Collection Exp	EXP903	21,106	113,575
53	Sales Expenses Labor Accts 912 to 916	LABSA	1,231	1,394
30	Acct 912-Demonstrating & Selling Exp	EXP912	1,536	1,789
3	Acct 913-Advertising Exp	EXP913	3,328	1,858
32	Acct 916-Miscellaneous Sales Exp	EXP916	96	72
33	Acct 920-Administrative & General Sal	EXP920	14,394	23,315
34	Acct 921-Office Supplies & Expenses	EXP921	32,234	52,211
35	Acct 922-Administrative Exp Transf-Cr	EXP922	(31,448)	(50,838)
36	Acct 923-Outside Services Employed	EXP923	192,548	294,946
37	Acct 924-Property Insurance	EXP924	0 00 00	38 776
8	-	EXFYZD	23,940	36,770
<u>6</u>		EXFUSO	47'/74 E 602	200,002
40	Acct 928-Regulatory Commission Exp	EXP928	769'9	8,448

18,225 6,586 3,091 32,033 56,834 1,526 83,629 6,948 8,789 14,219 57,252 57,252 128,210

0 7,875 17,041 17,902 13,802 13,833 5,255 95,748 3,122 3,122 3,122 3,954 6,205 6,205 6,205 14,623 99,240 1,623 99,240

1,955 26,302 11,339 3,436 83,385 8,385 11,394 1,789 1,789 1,888 1,888 5,2211 52,211 (50,939)

9,167 14,178 6,701 16,112 37,123 1,625 53,744 3,323 4,196 7,064 2,22 35,130 78,669 76,6752) 448,926 0 58,426 13,904

1,416,417 530,416 446,438 11,419 32,181 178,106 39,911 470,123 26,767 4,887 217,563 3,256

0 5,743 16,186 99,879 86,519 236,459 16,270 2,458 121,240 1,638

4,934 13,905 90,410 231,141 203,134 19,882 2,112 1,407 1,407

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

6/30/2005 11:42 AM

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1)

Page 61 of 322

11:19 AM

30-Jun-05

HIGH WINTER HIGH ANNUAL G-42 & T-42	0	40,392	44,101	4,889	1,579	27,275	3,195	289,611	91,327	9,620	1,765,928	8,210,675	23,193	0.354.720	7,133,295	1,019,966	247,259	2,152,944	40,643,938	30 570	244,871	1,919,268	545,557	793,240	14,007,349	321 680	299.097	18,125	63,228	10,066	48,494	20,656	1,162,844	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 62 of 322
HIGH WINTER MED ANNUAL G-41 & T-41	0	62,984 314 632	72,620	6,247	2,018	34,857	4,083	389 190	206,428	13,228	2,907,893	12,803,042	30,674	944,172,473 0.017,221	14.187,200	1,640,899	935,120	2,751,410	57,012,993 63,445	70,443 70,440	312,940	2,452,779	697,209	1,013,741	17,901,054	15,445,603	467 119	61,710	215,277	12,864	61,975	26,397	1,871,146	4,960,001
HIGH WINTER LOW ANNUAL G-40 & T-40	0	55,485 261 352	57,588	3,072	365	17,141	2,008	783,027	437,979	11,326	2,305,982	11,278,538	20,423	30,339,041	24,674,433	1,102,812	1,006,862	1,352,989	45,733,749	24 867	153,886	1,206,139	342,848	498,501	8,802,732	7,595,377	367,727	52,327	182,545	6,326	30,476	12,981	1,596,979	ooc'nor''
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OUTDOOR	0	01 60	· <del>-</del>	0	0	₩ 1	0 7	L 77	<u>ა</u> ო	0	58	343	- 100	, U.Z.(1		34	0	88	1,363	) C	10	78	22	32	570	491	- 6	0	0	0	2	-	36	0 4
RESIDENTIAL NON-HEATING R-1 & R-2	0	53,404	49,285	517	167	2,886	338	549,382	578.619	13,199	1,973,502	10,855,556	15,945	28,120,935 7,960,470	32.845.145	791,170	1,551	227,803	36,390,910	084,080	4,18/ 25.910	203,078	57,725	83,933	1,482,119	1,278,837	343,004	60,503	211,065	1,065	5,131	2,186	1,430,391	z,033,893
RESIDENTIAL HEATING R-3 & R-4	0	493,314	497,593	26,979	8,713	150,527	17,634	6,125,365	4.254.370	131,506	19,924,907	100,277,501	214,839	329,937,906	217,080,792	9.165.078	37,964	11,881,733	402,020,393	1,800,200	71.351.404	10,592,119	3,010,837	4,377,756	77,304,202	66,701,405	3,408,170	392,844	1,370,442	55,551	267,633	113,995	14,083,458	71,102,439
TOTAL	0	863,406	846.177	178,302	57,587	994,820	116,542	10,606,968	4,229,606 5,838,988	205,166	33,883,089	175,507,389	358,013	538,533,185	83,726,431	15.871.085	3,090,784	22,458,288	662,036,839	8,489,829	412,767	20,020,721	5,690,941	8,274,626	146,116,729	126,075,826	5,917,985	644 449	2,248,171	367,132	1,768,764	753,385	23,718,343	36,141,856
ALLOC	EXP929	EXP930	EXP937	TLABPO	TLABPM	TLABLO	TLABLM	TLABDO	ILABUM TI ABCA	TLABSA	GENPLT	REVCLAIM	EXP9123	Pt.136780	PL 13813 Pl T3803	EXP8519	TOTCDEP	PLT386	DISTRPLT	EXP904S	EXP9040	PLT367JC	PLT367CI	PLT367CP	PLT367CS	PLT367P	PL 13910E	PI T397M	PLT397E	PLT304L	PLT305L	PLT320L	OMLAB	NAME OF THE O
DELIVERY COMPONENTS INTERNALLY DEVELOPED CONT-30	1 Acct 929-Duplicate Charges-Cr		3 Acct 931 Rents 4 Acct 932 Maintenance of General Plant	5 Total LPG Gas Operating Labor	1	7 Total LNG Gas Operating Labor			10 Total Transm & Distr Maintenance Labor	12 Total Sales Expense Labor	•			16 Acct 367 Mains and Acct 380 Services	17 Acct 381, 382 & 383 - Meters & Hise Keg						24 Acct 904-Uncollectible Accts-Other Rev			28 Acct 367-Gas Mains - Cathodic Protect	-	-	31 Acct 391-Office Equipment						-	39 Infation Adjustment Residual O&M

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## BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

11:19 AM

30-Jun-05

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 64 of 322

11:19 AM

30-Jun-05

Attachment AG-22-44

DELIVERY COMPONENTS

TOTAL COMPANY INPUT	Page 14, Line 8	Page 14 , Line 12	Page 14 , Line 18	Page 14 , Line 22	Page 19, Line 5	Page 19, Line 9	Page 19, Line 17	Page 19, Line 21	Fage 20 - Line 10	Pane 21 Tine 4	Page 21, Line 9	Pg 4, Ln 3 & 17		Pg 12, Ln 28 & 32	Pg 3, Ln 11 & 14	Pg 3 , Line 15, 16 & 17	Pg 3, Line 14, 15, 16 & 17			Page 3, Line 21	Page 3, Line 23 & 25	Pg 12, Line 9 to 19			Page 3, Line 5			Page 5, Life 5			Page 4, Line 13	Page 4, Line 14	Page 2 , Line 6 & 7	Page 2 , Line 10 & 11	Page Z, Line 15 & 16	Page ZZ , Line 15	
ALLOC	EXP929	EXP930	EXP931	EXP932	TLABPO	LABPM	TLABLO	TIABLM	TIABON	TIABCA	TLABSA	GENPLT	REVCLAIM	EXP9123	PL_T36780	PLT3813	PLT3803	EXP8519	TOTCDEP	PLT386	DISTRPLT	EXP904S	EXP9040	PLT367BS	PLT367JC	PLT367CI	PL136/CP	PL 130/C3	DI T2040E	PLT391IT	PLT397M	PLT397E	PLT304L	PLT305L	PL1320L	OMLAB	
INTERNALLY DEVELOPED CONT-30	1 Acct 929-Duplicate Charges-Cr	2 Acct 930-Miscellaneous General Exp	3 Acct 931 Rents	7		6 Tot LPG Gas Maintenence Labor			9 Total Transm & Distr Operating Labor		12 Total Sales Expense Labor		14 Claimed Sales Revenues less Gas Costs	15 Sales Expense Accounts 912 to 913	16 Acct 367 Mains and Acct 380 Services	17 Acct 381, 382 & 383 - Meters & Hse Reg	-		20 Total Customer Deposits	-		-	-	-	-	-		29 Acct 367-5as Mains - Coated Steel	-	31 Acct 391-Office Equipment			35 Acct 304 Lnd Rghts-LNG & LPG Dir Csts	•		38 Total Gas Operation & Maintenance Labor 20 Infation Adjustment Residual O&M	_

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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HIGH WINTER HIGH ANNUAL G-42 & T-42	0 112,478	44,970,985 3,214,579 7,406 1,526,086 44,970,985 229,137 43,008,880 3,214,579 1,526,086 874,721	State Gas Company D.T.E. 05-27 chment AG-22-44(1) Page 65 of 322
HIGH WINTER MED ANNUAL G-41 & T-41	0 247,767	63,732,988 5,199,541 55,963 2,383,384 63,732,988 347,806 60,683,753 5,199,541 2,383,384 1,365,406	
HIGH WINTER LOW ANNUAL G-40 & T-40	0 503,043	50,799,344 4,570,452 198,495 1,876,254 50,799,344 292,281 48,510,554 4,570,452 1,876,254 1,284,479	
OUTDOOR LIGHTING	ဝက	1,513 143 63 1,445 111 53 95	
RESIDENTIAL NON-HEATING R-1 & R-2	0 630,563	40,367,793 4,403,315 396,597 1,541,812 40,367,793 262,471 38,419,321 4,40,813 1,541,812 1,335,042	
RESIDENTIAL HEATING R-3 & R-4	0 4,707,105	446,150,209 39,224,617 2,635,699 16,452,928 446,150,209 2,601,335 425,201,864 39,224,617 16,452,928 12,143,301	
TOTAL	324,558,618 6,522,561	754,551,098 73,838,274 3,358,808 28,074,804 754,551,098 4,524,370 718,484,245 398,396,892 28,074,804 20,141,561	
ALLOC	GASCOSTS EXP903T	BASIS1P BASIS1OM BASIS10 BASIS20 BASIS20 BASIS7OM BASIS9 BASIS9 BASIS9 BASIS9	
DELIVERY COMPONENTS INTERNALLY DEVELOPED CONT-31	1 Total Gas Supply Expense 2 Acct 903-Cust Records & Coll Subtotal	NiSource Service Charges Allocators   1   NiSource Service Charges Allocators   1   NiSource Service Charges Allocators   1   1   Nisource Service Charges Allocators   1   1   1   1   1   1   1   1   1	

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 66 of 322

11:19 AM

30-Jun-05

LOW WINTER LOW WINTER		0 0 1 47,108 73,372	9 19,025,787 32,439,258 1,387,862 2,307,503 2,979 1,126,110 19,025,787 32,439,288 97,965 166,323 18,181,289 30,989,180 1,387,862 2,307,503 657,443 626,273 373,778 626,273
LOW WINTER	G-51 & T-51	0 83,648	19,894,459 1,701,121 20,955 768,883 19,894,459 11,149 18,913,143 1,701,121 768,883 439,935
LOW WINTER	C-50 & T-50	0 98,958	9,757,141 958,731 39,595 38,766 9,757,141 68,766 9,269,254 958,755 258,655
HIGH WINTER	LRG HI ANNUAL G-43 & T-43	0 18,517	8,205,107 584,855 181 284,926 8,205,107 41,894 7,838,212 584,855 284,926 158,012
	ALLOC	GASCOSTS EXP903T	BASIS 1P BASIS 10M BASIS 10 BASIS 11 BASIS 20 BASIS 20 BASIS 7P BASIS 9 BASIS 9 BASIS 9 BASIS 9
DELIVERY COMPONENTS	INTERNALLY DEVELOPED CONT-31	1 Total Gas Supply Expense 2 Acct 903-Cust Records & Coll Subtotal	MiSource Service Charges Allocators  MiSource Service Charges Allocators  Basis 1 - 50% Gross Plant  Basis 10 - Number of Annual Customers  Basis 11 - Labor  Basis 20 - Total Direct Billed  Basis 7 - 50% Deprec Plant  Basis 7 - 50% Deprec Plant  Basis 7 - 50% O&M less NIS 923  Basis Co 12 - Oth NiSource Serv Chrgs  Basis Co 12 - Oth NiSource Serv Chrgs  Mid Misson Misson Misson

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 67 of 322

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30-Jun-05

TOTAL COMPANY INPUT

TOTAL COMPANY INPUT	Page 10 , Line 7 Pg 12 , Line 3 to 5	Page 4 . Line 18 See Allocator Descriptions Page 26 . Line 31 Page 22 . Line 21 Page 4 . Line 18 See Allocator Descriptions See Allocator Descriptions Page 22 . Line 21 Page 13 . Ln 6 to 17 & 28
ALLOC	GASCOSTS EXP903T	BASIS1P BASIS10M BASIS11 BASIS2 BASIS7P BASIS7P BASIS7P BASIS7P BASIS7P BASIS7P BASIS7P
INTERNALLY DEVELOPED CONT-31	Total Gas Supply Expense Acct 903-Cust Records & Coll Subtotal	NiSource Service Charges, Allocators.  Basis 1 - 50% Gross Plant Basis 1 - 50% O&M less Gas & NIS 923 Basis 10 - Number of Annual Customers Basis 11 - Labor Basis 20 - Total Direct Billed Basis 20 - Total Direct Billed Basis 7 - 50% O&M less NIS 923 Basis 9 - Labor Basis 9 - Labor Basis Co 12 - Oth NiSource Serv Chrgs

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 68 of 322

# BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

11:19 AM

30-Jun-05

ENIO			RESIDENTIAL	RESIDENTIAL		HIGH WINTER	HIGH WINTER	HIGH WINTER
	20114	TOTAL	HEATING P.3 & P.4	NON-HEATING	OUTDOOR	LOW ANNUAL	MED ANNUAL	HIGH ANNUAL
INTERNALLY DEVELOPED CONT-32			5	4 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		3	5	3
REVENUES FROM GAS SALES								
Revenues Firm Sales of Gas		478,651,282	323,429,755	10,830,018	2,726	31,946,429	46,870,369	22,321,850
Annual Base Revenues - Sales Actual		122,553,551	90,306,804	5,317,329	479	9,322,851	8,796,996	2,913,844
Annual Base Rev - Trans Actual		17,846,899	23,420	1,127	0	646,079	3,200,449	4,286,966
		307,478,651	211,649,336	5,037,827	2,066	20,118,078	31,776,012	13,793,415
Production & Storage Revenues		9,129,632	6,662,418	66,089	7	602,472	924,653	396,525
GAF Indirect Bad Debt Revenues		7,118,165	4,941,538	109,207	47	438,488	717,301	324,983
Weather Normalztn Adj Base Rev-Sales		(2,307,187)	(1,714,352)	0	0	(250,352)	(253,911)	(82,199)
Weather Normalztn Adj Base Rev-Trans		(248,396)	(504)	0	0	(19,193)	(94,414)	(127,701)
9 GAF Deferred Direct Gas Revenues		17,079,967	11,561,095	298,440	127	1,088,006	1,803,283	816,017
		19,129,611	13,280,067	293,486	125	1,178,409	1,927,700	873,371

17,483,688 44,135,406 8,210,675 7,432

38,636,479 54,160,592 12,803,042 56,195

23,311,210 25,211,236 11,278,538 200,206

9.050% 2,728 2,728 343

9.050% 6,394,258 6,396,166 10,855,556 400,515

9.050% 247,703,740 247,783,289 100,277,501 2,666,494

365,949,048 493,498,312 160,688,861 3,395,936

9.050%

REVENUE REQUIREMENT INPUTS

1 Claimed Rate of Return
2 Annual Booked Therm Sales
3 Annual Booked Therm Throughput
4 Proposed Sales Revenues
5 Total Annual Bills

9.050%

9.050%

9.050%

Page 32-1

6/30/2005 11:42 AM

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 69 of 322

11:19 AM

30-Jun-05

DELIVERY COMPONENTS		HIGH WINTER	LOW WINTER	LOW WINTER MED ANNUAL	LOW WINTER	LOW WINTER
INTERNALLY DEVELOPED CONT-32	ALLOC	G-43 & T-43	G-50 & T-50	G-51 & T-51	G-52 & T-52	G-53 & T-53
REVENUES FROM GAS SALES		4 903 279	5 775 878	15 241 815	9 011 447	8 317 714
2 Applied Base Revenues - Sales Actual		488.932	1,654,681	2.437,223	913,027	401,385
3 Annual Base Rev - Trans Actual		664,767	254,714	1,207,966	2,393,361	5,168,050
4 GAF Direct Revenues		3,381,173	3,503,816	10,545,356	5,181,132	2,490,440
5 Production & Storage Revenues		92,312	71,008	168,782	91,183	54,183
6 GAF Indirect Bad Debt Revenues		82,200	84,141	242,185	121,626	56,450
7 Weather Normalztn Adj Base Rev-Sales		(6,373)	0	0	0	0
8 Weather Normalztn Adj Base Rev-Trans		(6,584)	0	0	0	0
9 GAF Deferred Direct Gas Revenues	٠	206,853	207,518	640,304	311,118	147,207
) GAF Indirect Revenues		220,906	226,123	920,856	326,863	151,705
REVENUE REQUIREMENT INPUTS						
1 Claimed Rate of Return		9.050%	9.050%	9.050%	9.050%	9.050%
2 Annual Booked Therm Sales		4,431,946	4,446,204	13,718,907	6,665,891	3,153,997
3 Annual Booked Therm Throughput		9,468,031	5,243,986	21,369,383	25,505,268	54,222,227
4 Proposed Sales Revenues		1,447,096	2,343,956	4,184,599	3,531,742	5,755,813
5 Total Annual Bills		181	806'68	21,073	2,989	799

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

11:19 AM

30-Jun-05

HIGH WINTER HIGH ANNUAL G-42 & T-42			0.04999 0.00000 0.00000 0.09586	0.02742 0.02742	0.00000		0.09586	0.04862	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 70 of 322
HIGH WINTER MED ANNUAL G-41 & T-41			0.12724 0.00000 0.00000 0.12251	0.03504	0.00000		0.12251	0.07828	
HIGH WINTER LOW ANNUAL G-40 & T-40			0.08528 0.00000 0.00000 0.06024	0.01723	0.0000.0		0.06024	0.07126	
OUTDOOR LIGHTING			0,0000,0 0,0000,0 0,0000,0	0.00000	0.00000		0.00000	0.00000	
RESIDENTIAL NON-HEATING R-1 & R-2			0.00508 0.00000 0.00000 0.01014	0.00290	0.00000		0.01014	0.06501	
RESIDENTIAL HEATING R-3 & R-4			0.69669 0.00000 0.00000 0.52906	0.15131	0.00000		0.52906	0.63561	
TOTAL			1.00000 0.00000 0.00000 1.00000 28.6%	0.28600	0.00000		1.00000	1.00000	
ALLOC				DEMLPG DEMLNG	DBASE DREMAIN		DISTR	PENSION	
DELIVERY COMPONENTS	RATIO TABLE-33	CAPACITY RELATED	PRODUCTION ALLOCATORS  Design Day Remaining Demands - Sales  LPG Production Allocator - Prod Function  LNG Production Allocator - Prod Function  LNG Prod Prod Alloc - Distr Function  LPG & LNG Prod Alloc - Distr Function	PROD-PRESSURE SUPP ALLOC 10 LPG Prod & Presure Support Alloc 11 LNG Prod & Presure Support Alloc	12 GAS COST ALLOCATORS 14 Base Demand Gas Costs 15 Remaining Demand Gas Costs	16 17 18 DISTRIBUTION ALLOCATORS	1 Distribution Allocator	<ol> <li>Pension &amp; PBOP Expense Allocator</li> </ol>	+ c c c c c c c c c c c c c c c c c c c

BRK7.xis COST OF SERVICE

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 71 of 322	

BRK7,xls COST OF SERVICE

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004
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Attachment AG-22-44

	LOW WINTER LRG HI ANNUAL	G-53 & T-53		0.00443 0.00000 0.00000 0.07936	0.02270 0.02270	0.00000		0.07936	0.03300					
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER HIGH ANNUAL	G-52 & T-52		0.00349 0.00000 0.00000 0.03992	0.01142	0.00000		0.03992	0.02038					
	LOW WINTER MED ANNUAL G-51 & T-51			0.01186 0.00000 0.00000 0.03429	0.00981	0.00000		0.03429	0.02483					
	LOW WINTER LOW ANNUAL	G-50 & T-50		0.00420 0.00000 0.00000 0.00001	0.00243 0.00243	0.00000		0.00851	0.01434					
	HIGH WINTER LRG HI ANNUAL	G-43 & T-43		0.01174 0.00000 0.00000 0.02009	0.00574 0.00574	0.00000		0.02009	0.00866					
11:19 AM		ALLOC			DEMLPG DEMLNG	DBASE OREMAIN		DISTR	PENSION					
30-Jun-05	DELIVERY COMPONENTS	RATIO TABLE-33	CAPACITY RELATED	PRODUCTION ALLOCATORS Design Day Remaining Demands - Sales LPG Production Allocator - Prod Function LNG Production Allocator - Prod Function LNG Production Allocator - Prod Function LNG Production Allocator - Distr Function LNG RNG Prod Alloc - Distr Function LNG & LNG Distr Pressure Support %	8 9 PROD-PRESSURE SUPP ALLOC 10 LPG Prod & Presure Support Alloc 11 LNG Prod & Presure Support Alloc	GAS COST ALLOCATORS  14 Base Demand Gas Costs	DISTRIBUTION ALLOCATORS	1 Distribution Allocator	3 Pension & PBOP Expense Allocator 4	₩ •	<b>20 20 20</b>	Ol M	et 10 (0 h	~ <b></b>
					& Q 0 5 1 1	7 62 4 65 6	17 18							0

Page 33-2

HIGH WINTER HIGH ANNUAL G-42 & T-42	0.00000	0.04778								Bay S Attach	tate Gas D. nment A Page	s Compa T.E. 05 G-22-44 e 72 of 3	any -27 -(1) 322
HIGH WINTER MED ANNUAL G-41 & T-41	0.00000	0.10558											
HIGH WINTER LOW ANNUAL G-40 & T-40	0.0000	0.06370											
OUTDOOR LIGHTING	0.00000	0.00001											
RESIDENTIAL NON-HEATING R-1 & R-2	0.00000	0.01747											
RESIDENTIAL HEATING R-3 & R-4	0.00000	0.67688											
TOTAL	0.00000	1.00000											
ALLOC	EBASE EREMAIN												
DELIVERY COMPONENTS  RATIO TABLE CONT-34	COMMODITY RELATED  1 Base Commodity Gas Costs 2 Remaining Commodity Gas Costs 3	5 6 7 Annual Therm Firm Sales Sendout 8 9 9	112 133 14	15 16 17	18 19 20 20	2.2 2.3 2.4	25 26 27	28 29 31	32 33 35 35				

BRK7.xls COST OF SERVICE

Page 34-1

6/30/2005 11:42 AM

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

11:19 AM

30-Jun-05

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 73 of 322

6/30/2005 11:42 AM

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004

11:19 AM

30-Jun-05

LOW WINTER LRG HI ANNUAL	G-53 & T-53		0.00000	0.00862			
LOW WINTER HIGH ANNUAL			0.00000	0.01822			
LOW WINTER MED ANNUAL	G-51 & T-51		0.00000	0,03749			
LOW WINTER LOW ANNUAL	G-50 & T-50		0.00000	0.01215			
HIGH WINTER LRG HI ANNUAL	G-43 & T-43		0.00000	0.01211			
	ALLOC		EBASE EREMAIN				
DELIVERY COMPONENTS	RATIO TABLE CONT-34	COMMODITY RELATED	Base Commodity Gas Costs Remaining Commodity Gas Costs	Annual Therm Firm Sales Sendout			

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	30-Jun-05	11:19 AM	BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	Atta
DELIVERY COMPONENTS				

ER HIGH WINTER IAL HIGH ANNUAL 11 G-42 & T-42		0.02697 0.02089 0.09576 0.02812 0.09576 0.02812 0.29593 0.06925 0.12251 0.09586 0.12251 0.09586 0.12251 0.09586 0.12251 0.09586 0.07106 0.09586 0.07106 0.09586 0.07106 0.09586 0.07251 0.09586 0.01662 0.00237 0.01662 0.00237 0.01662 0.00237 0.01682 0.003380	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 74 of 322	BRK7.xis COST OF SERVICE
HIGH WINTER MED ANNUAL G-41 & T-41				BRK7.x
HIGH WINTER LOW ANNUAL G-40 & T-40		0.07815 0.08120 0.08120 0.08120 0.08120 0.38215 0.33329 0.06024 0.06024 0.06024 0.05509 0.05509 0.05509		
OUTDOOR		0000000 000000000000000000000000000000		
RESIDENTIAL NON-HEATING R-1 & R-2		0.10922 0.09388 0.09388 0.00007 0.00152 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.00552 0.06552 0.06552		Page 35-1
RESIDENTIAL HEATING R-3 & R-4		0.72588 0.60958 0.60958 0.01269 0.011269 0.01311 0.52906 0.52906 0.52906 0.73673 0.73673 0.73673 0.73673 0.73673 0.73673 0.73673 0.73673 0.73673 0.73673 0.73673 0.73673		
TOTAL		1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000		
ALLOC		- CUST380 CUST381 CUST383 CUST383 CUST3862 CUST3862 CUST3863 CUST3863 CUST3863 CUST3863 CUST3863 CUST3863 CUST3863 CUST3863 CUST3863 CUST3863 CUST3863 CUST3903 CUST3903 CUST3903 CUST3903 CUST3903 CUST3903 CUST3903 CUST3903		
DELIVERY COMPONENTS	RATIO TABLE CONT-35 CUSTOMER RELATED	Acct 380 Gas Services 2 Acct 381 Gas Meters 3 Act 382 Meter Installations 4 Acct 382 Meter Installations 5 Customer Deposits 6 Transportation Customers 7 Acct 386.0 Gas Water Heaters 8 Acct 386.2 Cascade Diamond Boilers 9 Acct 386.2 Cascade Diamond Boilers 10 Acct 386.2 Cascade Diamond Boilers 11 Acct 386.2 Records & C/S 12 Acct 386.2 Records & C/S 13 Acct 903. Water Reading Expense 14 Acct 903. Cust Records & Solling Exp 16 Acct 913-Advertising Expense 17 Acct 903 Collections Expense 18 Acct 903 Collections Expense 19 Acct 903 Collections Expense 20 22 21 22 23 22 24 25 23 33 34 34 35 35	·	6/30/2005 11:42 AM

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 75 of 322

	LOW WINTER LRG HI ANNUAL G-53 & T-53	0.00390 0.00708 0.00708 0.00000 0.01819 0.07936 0.07936 0.07936 0.07936 0.00219 0.00024 0.00024 0.005506 0.07936 0.07936 0.07936 0.07936 0.07936 0.07936 0.07936
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER HIGH ANNUAL G-52 & T-52	0.00840 0.01536 0.01536 0.03397 0.03992 0.03992 0.03992 0.03992 0.03992 0.03992 0.03992 0.03992 0.03992 0.03992
	LOW WINTER MED ANNUAL G-51 & T-51	0.01010 0.04103 0.04103 0.04103 0.11925 0.13429 0.03429 0.03429 0.03429 0.03429 0.00755 0.00755 0.002477 0.02477
	LOW WINTER LOW ANNUAL G-50 & T-50	0.01559 0.02599 0.02599 0.06829 0.00851 0.00851 0.01377 0.00851 0.01183 0.01123 0.01123 0.01123
	HIGH WINTER LRG HI ANNUAL G-43 & T-43	0.00089 0.00200 0.00200 0.00200 0.02009 0.02009 0.02009 0.02009 0.00054 0.00055 0.00065 0.00065 0.00065 0.00065 0.00065 0.00065 0.00065 0.00065
11:19 AM	ALLOC	CUST380 CUST381 CUST381 CUST382 CUSTDEP CUSTTR CUST3863 CUST3863 CUST3863 CUST488 CUST488 CUST902 CUST903 CUST
30-Jun-05	DELIVERY COMPONENTS  RATIO TABLE CONT-35  CUSTOMER RELATED	1 Act 380 Gas Services 2 Act 381 Gas Meters 3 Act 382 Meter Installations 4 Act 383 Gas Regulators 5 Customer Deposits 6 Transportation Customers 7 Act 386.0 Gas Water Heaters 8 Act 386.2 Cascade Diamond Boilers 9 Act 386.2 Cascade Diamond Boilers 10 Act 386.2 Cascade Diamond Boilers 10 Act 386.2 Conversion Burners 11 Act 382-Reunia Rev-Will & Conv Burn 12 Act 483-Rental Rev-Will & Conv Burn 13 Act 902 Meter Reading Expense 14 Act 902 Meter Reading Expense 15 Act 912-Demonstrating & Selling Exp 16 Act 913-Advertising Expense 17 Act 879-Customer Installations Exp 18 Act 903 Collections Expense 19 20 21 22 23 23 24 24 25 26 29 30 30 31 31 33 34

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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HIGH WINTER HIGH WINTER MED ANNUAL HIGH ANNUAL				0.00000 0.00000 0.00000		0.26530 0.00000			0.0000	0.00000 0.000000			0.0000							0.00000
HIGH WINTER HIGH I				0.00000	0.00000	0.335/7	0.0000	0.00000	0.0000	0.0000	0.00000		0.33571	000000	0.00000	0.0000	0.00000	0.00000	0.00000	0.00000
OUTDOOR	PINCHING			0.00000	0.12741	0.00000	0.0000	0.00000	0.00000	0.00000	0.00000		000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	000000
RESIDENTIAL NON-HEATING	R-1 & R-2			0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		00000	0.0000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RESIDENTIAL HEATING	R-3 & R-4			0.30260	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		000000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
TOTAL	COMPANY			0.30260	0.12741	0.33571	0.34378	0.26615	0.36876	0.25713	0.67205		0.09671	0.5557	0.34378	0.26615	0.36876	0.25713	0.37692	0.67205
	ALLOC			C904R3	C904OL	C904R40	C904R42	C904R43	C904R50	C904T51	C904R53		0.40%	C487R40	C487R42	C487R43	C487R50	C487T51	C487R52	C487R53
DELIVERY COMPONENTS	RATIO TABLE CONT-36	INTERNALLY DEVELOPED	UNCOLLECTIBLE ACCOUNTS	1 Residential Heating Rate R-3 & R-4	3 Outdoor Lighting		5 High Winter Med Amuar Rate G41 & 141 6 High Winter High Amual Rate G42 & T42				10 Low Winter Fign Annual Rate G53 & T52 11 Low Wint Large Annual Rate G53 & T53	12 13 LATE PAYMENT CHARGES		15 High Winter Low Annual Kale G40 & 140				_	21 Low Winter High Annual Rate G52 & T52	_

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 76 of 322

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 77 of 322

11:19 AM
30-Jun-05

LOW WINTER LRG HI ANNUAL G-53 & T-53			0.00000	0.00000	0.0000	0.00000	0.00000	0.00000	0.07703		0.00000	0.0000	0.00000	0,00000	0.00000	0.00000	
LOW WINTER HIGH ANNUAL G-52 & T-52			0.00000	0.00000	0.00000	0.00000	0.00000	0.37692	0.0000.0		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
LOW WINTER MED ANNUAL G-51 & T-51			0.00000	0.00000	0.00000	0.00000	0.25713	0.00000	0.00000		0.00000	0.00000	0.00000	0.00000	0.25713	0.00000	
LOW WINTER LOW ANNUAL G-50 & T-50			0.00000	0.0000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000	0.00000	0.00000	0.36876	0.00000	0.00000	
HIGH WINTER LRG HI ANNUAL G-43 & T-43			0.00000	0.0000	0.0000	0.26615	0.0000	0.00000	0.0000		0.00000	0.00000	0.26615	0.0000	0.00000	0.00000	
ALLOC			C904R3 C904R1	C904R40	C904R41	C904R43	C904R50	C904R52	C904K53		C487R40	C487R41	C487R43	C487R50	C487T51	C487R52	
DELIVERY COMPONENTS RATIO TABLE CONT-36	INTERNALLY DEVELOPED	UNCOLLECTIBLE ACCOUNTS	1 Residential Heating Rate R-3 & R-4 2 Residential Non-Heating Rate R-1 & R-2 2 Condoct Inhitian		5 High Winter Med Annual Rate (541 & 141 6 High Winter High Annual Rate (542 & T42	7 High Wint Large Annual Rate G43 & T43	8 Low Winter Low Annual Rate G50 & 150 9 1 tow Winter Med Annual Rate G51 & T51		11 Low Wint Large Annual Rate G53 & T53 12	13 LATE PAYMENT CHARGES	15 High Winter Low Annual Rate G40 & T40		1/ High Wint Large Annual Rate G42 & 142 18 High Wint Large Annual Rate G43 & T43			21 Low Winter High Annual Rate G52 & T52	22 23 24 25 26 26 27 28 29 30 31 32 33 33 33 34 35 36 37 37 37 37 37 37 37 37 37 37 37 37 37

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 78 of 322

30-Jun-05 11:19 AM

TOTAL COMPANY			
-	ALLOC		
	RATIO TABLE CONT-36	INTERNALLY DEVELOPED	UNCOLLECTIBLE ACCOUNTS

01 W 41 10 10 P W	12 12	2
Line 10, Col 2 Line 10, Col 3 Line 10, Col 4 Line 10, Col 6 Line 10, Col 6 Line 10, Col 6	Line 10, Col 19 Line 10, Col 10 Line 10, Col 12 Line 10, Col 12	Line 10, Col 3 Line 10, Col 3 Line 10, Col 3 Line 10, Col 3 Line 10, Col 10 Line 10, Col 11 Line 10, Col 11
Page 23, L Page 23, L Page 23, L Page 23, L Page 23, L Page 23, L		Page 23, L
C904R3 C904R1 C904OL C904R40 C904R41 C904R42	C904R50 C904R51 C904R53 C904R53	C487R41 C487R41 C487R42 C487R50 C487T51 C487R52 C487R52
Residential Heating Rate R-3 & R-4 Residential Non-Heating Rate R-1 & R-2 Outdoor Lighting High Winter Low Annual Rate G41 & T41 High Winter Med Annual Rate G41 & T41 High Winter High Annual Rate G42 & T42 High Winter High Annual Rate G43 & T42	Low Winter Low Annual Rate G50 & T50 Low Winter High Annual Rate G52 & T52 Low Wint Large Annual Rate G53 & T53 Low Wint Large Annual Rate G53 & T53 LATE PAYMENT CHARGES	High Winder Low Annual Rate G40 & 140 Winder Wed Annual Rate G41 & T41 High Winder High Annual Rate G42 & T42 High Wint Large Annual Rate G43 & T43 Low Winter Low Annual Rate G50 & T50 Low Winter Med Annual Rate G51 & T51 Low Winter High Annual Rate G52 & T52 Low Wint Large Annual Rate G53 & T53
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30-Jun-05

HIGH WINTER HIGH ANNUAL G-42 & T-42	Bay State Gas Company 0.000 0.
HIGH WINTER MED ANNUAL G-41 & T-41	0.08446 0.08489 0.08489 0.03504 0.03504 0.03504 0.12251 0.12251 0.12251 0.12251 0.12251 0.12251 0.12251 0.02697 0.08689 0.08489 0.08489 0.08489 0.08489 0.08489 0.08489 0.08489 0.08489 0.08489 0.08489 0.08489 0.08489 0.08489 0.08504 0.03504 0.03504
HIGH WINTER LOW ANNUAL G-40 & T-40	0.06633 0.06683 0.01723 0.01723 0.01723 0.01723 0.01723 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06023 0.06023 0.06683 0.06683 0.06683 0.06683 0.06683 0.01723 0.01723 0.01723 0.01723
OUTDOOR LIGHTING	0.00000 0.0000 0.00000 0.0
RESIDENTIAL NON-HEATING R-1 & R-2	0.05350 0.05492 0.05492 0.00290 0.00290 0.00290 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.05492 0.05492 0.05492 0.05492 0.05492 0.05492 0.05492 0.05492 0.05492 0.05492 0.05492 0.05290 0.00290
RESIDENTIAL HEATING R-3 & R-4	0.59128 0.58604 0.58604 0.15131 0.15131 0.15131 0.15131 0.52906 0.52906 0.52906 0.52906 0.52906 0.52906 0.52906 0.52906 0.52906 0.52906 0.52906 0.52906 0.52906 0.52906 0.52906 0.52804 0.586131 0.15131 0.15131
TOTAL	0.97455 0.96181 0.97455 0.96181 0.28600 0.28600 0.28600 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 0.96181 0.968600 0.286
ALLOC	
DELIVERY COMPONENTS INTERNALLY DEVELOPED-37	1 Total Gas Plant In Service 2 Sum of Allocated Labor Expense 3 Acct 301 Organization 4 Act 303 Misc. Intangible Plant 5 Act 305 Structures & Improvements 6 Act 311 L.P. Gas Equipment 7 Act 320 Ohre Equipment 8 Act 321 L.N.G. Equipment 9 Act 386 Structures & Improvements 11 Act 386 Structures & Improvements 12 Act 387 Gas Mains 12 Act 380 Gas Services 14 Act 380 Gas Services 15 Act 381 Gas Meters 16 Act 382 Meter Installations 17 Act 380 Gas Services 18 Act 382 Governorment 22 Act 383 Gas Regulators 18 Act 380 Ghreat Installations 17 Act 380 Gas Water Heaters 18 Act 380 Ghreat Installations 17 Act 380 Gas Water Heaters 18 Act 381 Girnsportation Equipment 22 Act 382 Other Equipment 23 Act 389 Other Equipment 24 Act 390 Other Equipment 25 Act 393 Stores Equipment 26 Act 393 Stores Equipment 27 Act 393 Stores Equipment 28 Act 394 Tools, Shop & Garage Equip 29 Act 395 Communication Equipment 31 LPG Gas Prod Labor Acts 771 to 735 32 Act 719-Handling Expense 33 Act 719-Handling Expense 34 Act 736-Maintenance of Struct & Improv 35 LPG Gas Prod Labor Acts 774 to 772 36 Act 757-Vaporization Expense 40 Act 757-Vaporization Expense

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 80 of 322

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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11:19 AM

30-Jun-05

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 81 of 322

### DELIVERY COMPONENTS

11:19 AM

30-Jun-05

TOTAL COMPANY INPUT	Page 4, Line 18 Page 22, Line 21 Page 22, Line 21 Page 22, Line 3 Page 22, Line 13 Page 22, Line 14 Page 22, Line 14 Page 23, Line 13 Page 33, Line 14 Page 33, Line 14 Page 33, Line 15 Page 33, Line 16 Page 33, Line 17 Page 33, Line 18 Page 33, Line 18 Page 33, Line 18 Page 33, Line 24 Page 34, Line 24 Page 44, Line 6 Page 44, Line 6 Page 44, Line 6 Page 44, Line 17 Page 44, Line 18 Page 44, Li	Page 9 , Line 14
ALLOC	PLANT LABOR PLT301 PLT303 PLT303 PLT305 PLT320 PLT320 PLT366 PLT366 PLT360 PLT360 PLT380 PLT380 PLT380 PLT380 PLT380 PLT380 PLT380 PLT380 PLT390 PLT3	EXP754 EXP757
INTERNALLY DEVELOPED-37		39 Acct / 54-Liqueraction Expense 40 Acct / 57-Vaporization Expense

11:19 AM

30-Jun-05

BRK7.xls COST OF SERVICE

HIGH WINTER HIGH ANNUAL G-42 & T-42	Page 82 of 322
HIGH WINTER MED ANNUAL G-41 & T-41	0.03504 0.03504 0.03504 0.03504 0.03504 0.03504 0.03504 0.03504 0.12251 0.12251 0.12251 0.12251 0.12251 0.12251 0.12251 0.12251 0.02000 0.12251 0.02001 0.02001 0.02001 0.02000 0.02535 0.02535 0.02697 0.07295
HIGH WINTER LOW ANNUAL G-40 & T-40	0.01723 0.01723 0.01723 0.01723 0.01723 0.01723 0.01723 0.01723 0.01723 0.06024 0.06260 0.06260 0.06260 0.06260 0.06260 0.062862 0.062862 0.062862 0.062862 0.062862 0.062862 0.062862 0.062862 0.062862 0.062862 0.06426 0.06426 0.06426 0.06426 0.06426 0.06426 0.06426 0.06426
OUTDOOR LIGHTING	00000000000000000000000000000000000000
RESIDENTIAL NON-HEATING R-1 & R-2	0.00290 0.00290 0.00290 0.00290 0.00290 0.00290 0.00290 0.00290 0.00290 0.00290 0.00290 0.00290 0.001014 0.010185 0.01014 0.01186 0.01186 0.01186 0.01186 0.01186 0.01186 0.01186 0.0186
RESIDENTIAL HEATING R-3 & R-4	0.15131 0.15131 0.15131 0.15131 0.15131 0.15131 0.15131 0.52906 0.55906 0.5590
TOTAL	0.28600 0.28600 0.28600 0.28600 0.28600 0.28600 0.28600 0.28600 0.28600 0.28600 0.28600 0.28600 0.28600 0.28600 0.000000
ALLOC	EXP759 EXP775 EXP777 LABLM EXP781 EXP781 EXP781 EXP861 EXP852 EXP851 EXP852 EXP8781 EXP8782 EXP8782 EXP8783 EX
DELIVERY COMPONENTS INTERNALLY DEVELOPED CONT-38	Act 759-Handling Expense  Act 775-Miscellaneous Production Exp Act 777-Lease Expense  LING Gas Prod Labor Acts 781 to 782  5 Act 781-Maintenance of Struct & Improved Act 782-Maintenance of Struct & Improved Act 782-Maintenance of Production Eq. 7 Total Intangible Plant  Total Intangible Plant  Total Intangible Plant  Total Intangible Plant  Total Str. Op Labor Acts 851 to 881 to Act 857-Measuring & Regul Stat Exp Act 874-Mains and Services Exp Act 878-Meter & House Regulator Exp Act 878-Meter & House Regulator Exp Act 878-Maintenance of Mains Act 880-Other Expenses Act 889-Maint of Compressor Station Eq Act 889-Maintenance of Services Act 892-Maintenance of Services Act 893-Maintenance of Services Act 892-Maintenance of Services Act 892-Maintenance of Services Act 892-Maintenance of Services Act 993-Muiter Records & Collection Exp Sales Expenses Labor Actts 902 to 903 Act 913-Advertising Exp  Act 920-Administrative & General Sal Act 921-Office Supplies & Expenses Act 922-Administrative & General Sal Act 923-Outside Services Employed Act 922-Injuries & Damages  Act 922-Injuries & Damages  Act 922-Injuries & Damages  Act 922-Injuries & Damages  Act 922-Injuries & Banages

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 83 of 322

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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LOW WINTER LRG HI ANNUAL G-53 & T-53	0.02270 0.02270 0.02270 0.02270 0.02270 0.02270 0.0424 0.0424 0.04424 0.04424 0.04424 0.04424 0.04424 0.04424 0.04424 0.04424 0.04424 0.07336 0.07336 0.07336 0.07336 0.07336 0.07336 0.07336 0.07336 0.07336 0.07338 0.07336 0.07338	
LOW WINTER HIGH ANNUAL G-52 & T-52	0.01142 0.01142 0.01142 0.01142 0.01142 0.01142 0.01142 0.01142 0.02345 0.03992 0.03932 0.0393	
LOW WINTER MED ANNUAL G-51 & T-51	0.00981 0.00981 0.00981 0.00981 0.00981 0.00389 0.03429	
LOW WINTER LOW ANNUAL G-50 & T-50	0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00243 0.00269 0.00851	
HIGH WINTER LRG HI ANNUAL G-43 & T-43	0.00574 0.00574 0.00574 0.00574 0.00574 0.00574 0.01016 0.00574 0.01127 0.00000 0.02009 0.01193 0.02009 0.01193 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.00200 0.00200 0.00200 0.00200 0.00200 0.00200 0.00200 0.00200 0.00200 0.00200 0.00200 0.000255 0.000825 0.000825 0.000825 0.000825 0.000825 0.000825 0.000825 0.000825 0.000825	
ALLOC	EXP759 EXP775 EXP777 LABLM EXP781 EXP781 EXP782 INTPLT LABDO EXP852 EXP852 EXP857 EXP857 EXP857 EXP868 EXP878	
DELIVERY COMPONENTS INTERNALLY DEVELOPED CONT-38	Acct 775-Handling Expense  2 Acct 775-Miscellaneous Production Exp 3 Acct 777-Lease Expense 4 LNG Gas Prod Labor Accts 781 to 782 5 Acct 787-Maintenance of Struct & Improv 6 Acct 787-Maintenance of Production Eq 7 Total Intangible Plant 8 Total Production Plant 9 Trans & Distr Op Labor Accts 851 to 881 10 Acct 857-Measuring & Regul Stat Exp 11 Acct 857-Measuring & Regul Stat Exp 12 Acct 875-Measuring & Regul Stat Exp 13 Acct 876-Mers & House Regulator Exp 14 Acct 876-Mers & House Regulator Exp 15 Acct 878-Merter & House Regulator Exp 16 Acct 889-Maint of Compressor Station Eq 22 Acct 889-Maintenance of Struct & Improv 23 Acct 892-Maintenance of Services 24 Acct 892-Maintenance of Other Equip 25 Acct 893-Maintenance of Other Equip 26 Customer Accts Labor Accts 902 to 903 27 Acct 893-Maintenance of Other Equip 28 Acct 892-Maintenance of Other Equip 29 Acct 893-Maintenance of Other Equip 20 Customer Accts Labor Accts 902 to 903 27 Acct 893-Maintenance of Other Equip 28 Acct 903-Cust Records & Collection Exp 39 Acct 903-Cust Records & Collection Exp 30 Acct 912-Demonstrating & Selling Exp 31 Acct 921-Office Supplies & Expenses 32 Acct 922-Administrative Exp Transf-Cr 34 Acct 922-Injuries & Damages 35 Acct 922-Injuries & Damages 36 Acct 922-Injuries & Damages 37 Acct 922-Injuries & Damages 38 Acct 922-Injuries & Damages 39 Acct 922-Injuries & Damages 30 Acct 922-Injuries & Damages 30 Acct 922-Injuries & Damages 31 Acct 922-Injuries & Damages 32 Acct 922-Injuries & Damages 34 Acct 922-Injuries & Damages 35 Acct 922-Injuries & Damages 36 Acct 922-Injuries & Damages 37 Acct 922-Injuries & Damages 38 Acct 922-Injuries & Damages 39 Acct 922-Injuries & Damages	

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 84 of 322

## DELIVERY COMPONENTS

30-Jun-05 11:19 AM

TOTAL COMPANY ALLOC INPUT		31	Page Page Page Page Page Page Page Page	
ALI	EXP759 EXP775 EXP777 LABLM	EXP/81 EXP782 INTPLT PRODPLT LABDO	EXP851 EXP852 EXP857 EXP874 EXP878 EXP879	EXP880 EXP881 EXP886 EXP883 EXP883 EXP893 EXP8903 EXP902 EXP902 EXP912 EXP912 EXP912 EXP913 EXP913 EXP913 EXP92
INTERNALLY DEVELOPED CONT-38		5 Acct 781-Maintenance of Struct & Improv 6 Acct 782-Maintenance of Production Eq 7 Total Intrapible Plant 8 Total Production Plant 9 Trans & Distr Ob Labor Accts 851 to 881		
			4- 4- 4- 4- 4- 4- 1	dadadadadadaeeeeeea

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HIGH WINTER HIGH ANNUAL G-42 & T-42	0.000000000000000000000000000000000000
HIGH WINTER MED ANNUAL G-41 & T-41	0.00000 0.07295 0.08582 0.08582 0.03504 0.03504 0.03504 0.03504 0.03535 0.08582 0.08582 0.08582 0.08582 0.08582 0.08582 0.08582 0.08586 0.08582 0.08586 0.08576 0.12251 0.12251 0.12251 0.12251 0.12251 0.12251 0.02576 0.03504 0.03504 0.03504
HICH WINTER LOW ANNUAL G-40 & T-40	0.00000 0.06426 0.07475 0.06806 0.01723 0.01723 0.01723 0.01723 0.01723 0.01723 0.01723 0.01723 0.01723 0.01723 0.01723 0.01723 0.01723 0.06806 0.06806 0.06908
OUTDOOR LIGHTING	00000000000000000000000000000000000000
RESIDENTIAL NON-HEATING R-1 & R-2	0.00000 0.06185 0.05824 0.00290 0.00290 0.00290 0.00290 0.00290 0.00291 0.05628 0.001014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01019 0.01019 0.00290 0.00290 0.00290 0.00290 0.00290 0.00290
RESIDENTIAL HEATING R-3 & R-4	0.00000 0.57136 0.58805 0.15131 0.15131 0.15131 0.15131 0.15131 0.15131 0.57749 0.58805 0.57747 0.60009 0.6128 0.52906 0.52908
TOTAL	0.00000 0.91557 0.97337 0.96507 0.28600 0.28600 0.28600 1.00000 0.2860
ALLOC	EXP929 EXP930 EXP931 EXP932 1LABPO 1LABPO 1LABDM 1L3674 PLT3679 PLT367C PLT367P PLT367C PLT367P PLT367C PLT367P PLT367C PLT
DELIVERY COMPONENTS INTERNALLY DEVELOPED CONT-39	Acct 929-Duplicate Charges-Cr 2 Acct 930-Miscellaneous General Exp 3 Acct 931 Rents 4 Acct 932 Maintenance of General Plant 5 Total LPG Gas Operating Labor 6 Total LPG Gas Maintenence Labor 7 Total LNG Gas Maintenence Labor 7 Total LNG Gas Maintenence Labor 8 Total Transm & Distr Maintenance Labor 10 Total Transm & Distr Maintenance Labor 11 Total Customer Accounts Labor 12 Total Sales Expense Labor 13 Total General Plant 14 Claimed Sales Revenues less Gas Costs 15 Sales Expense Accounts 912 to 913 16 Acct 381, 382 & 383 - Meters & Hse Reg 18 Acct 380, 381, 382 & 383 - Serv, Met & Reg 19 Transm & Distr Oper Accts 851 to 879 20 Total Customer Deposits 21 Acct 380, 381, 382 & 383 - Serv, Met & Reg 22 Acct 380, 481, 382 & 383 - Serv, Met & Reg 23 Acct 380, 481, 582 & 383 - Serv, Met & Reg 24 Acct 380, 481, 582 & 383 - Serv, Met & Reg 25 Acct 380, 481, 582 & 383 - Serv, Met & Reg 26 Acct 380, 481, 582 & 383 - Serv, Met & Reg 27 Total Customer Deposits 28 Acct 380, 481 - Serv, Met & Reg 28 Acct 387-Gas Mains - Distribution Plant 29 Acct 387-Gas Mains - Cast fron 29 Acct 387-Gas Mains - Cast fron 29 Acct 387-Gas Mains - Cast fron 30 Acct 387-Comm Equip Metscan 31 Acct 391-Office Equipment 32 Acct 397-Comm Equip Metscan 33 Acct 397-Comm Equip Metscan 34 Acct 397-Comm Equip Metscan 35 Acct 397-Comm Equip Metscan 36 Acct 387-Comm Equip Metscan 37 Acct 397-Comm Equip Metscan 38 Acct 397-Comm Equip Metscan 39 Acct 397-Comm Equip Metscan 39 Inflation Adjustment Residual O&M

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 86 of 322

	LOW WINTER LOW WINTER HIGH ANNUAL LRG HI ANNUAL G-52 & T-52 G-53 & T-53	0.00000 0.02273 0.01816 0.01142 0.01142 0.01142 0.02270 0.01142 0.02270 0.01142 0.02270 0.02770 0.02770 0.02770 0.02770 0.0273 0.0273 0.0273 0.03729 0.03822 0.03729 0.03729 0.03822 0.0475 0.03832 0.0475 0.03892 0.07936 0.07936 0.03992 0.07936	
AS COMPANY ERVICE STUDY DECEMBER 31, 2004	LOW WINTER LOW V MED ANNUAL HIGH A G-51 & T-51 G-52	0.00000 0.02384 0.03525 0.02855 0.00981 0.00981 0.00981 0.03499 0.02757 0.02855 0.02865 0.02865 0.02865 0.02865 0.02865 0.02838 0.02865 0.0384 0.03429	
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50	0.00000 0.01336 0.01475 0.00243 0.00243 0.00243 0.01192 0.01192 0.01192 0.01192 0.01192 0.01192 0.01193 0.01193 0.01193 0.01193 0.01193 0.01193 0.00851	
	HIGH WINTER LRG HI ANNUAL G-43 & T-43	0.00000 0.00825 0.00433 0.00574 0.00574 0.00574 0.01302 0.01127 0.01302 0.00265 0.00265 0.00265 0.01359 0.01193 0.001133 0.00209 0.0209 0.0209 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.00200 0.00200 0.00200	
11:19 AM	ALLOC	EXP929 EXP930 EXP931 EXP931 EXP932 TLABPO TLABPO TLABLO TLABLO TLABLO TLABLO TLABCA TLABCA TLABCA TLABCA TLABCA TLABCA TLABCA TLABCA TLABSA GENERA GENERA GENERA GENERA TLABCA TL	
30-vnn-05	DELIVERY COMPONENTS INTERNALLY DEVELOPED CONT-39	Acct 929-Duplicate Charges-Cr Acct 930-Miscellaneous General Exp Acct 931 Rents Acct 932 Maintenance of General Plant Total LPG Gas Maintenence Labor Total LNG Gas Maintenence Labor Total LNG Gas Maintenence Labor Total Intensm & Distr Operating Labor Total Charma & Distr Maintenance Labor Total Sales Expense Labor Total Sales Expense Labor Total General Plant Total General Plant Total General Plant & Resp Acct 367 Mains and Acct 380 Services Acct 367 Mains - Cart. Meter Reg Acct 367 Mains - Cart. Serv. Met & Reg Acct 367-Gas Mains - Cast Iron Acct 367-Gas Mains - Plastic Acct 391-Office IT Equipment Acct 391-Office IT Equipment Acct 391-	

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 87 of 322

### DELIVERY COMPONENTS

30-Jun-05 11:19 AM

TOTAL COMPANY INPUT	Page 14, Line 8 Page 14, Line 18 Page 14, Line 18 Page 14, Line 18 Page 19, Line 5 Page 19, Line 5 Page 19, Line 21 Page 20, Line 19 Page 20, Line 19 Page 21, Line 4 Page 21, Line 4 Page 21, Line 9 Pag 21, Line 9 Pag 31, Line 14 Pag 3, Line 14, 15, 16 & 17 Pag 3, Line 14, 15, 16 & 17 Pag 3, Line 14, 15, 16 & 17 Pag 3, Line 20 Page 3, Line 23 Page 3, Line 2 Page 3, Line 6 Page 4, Line 13 Page 4, Line 14 Page 4, Line 13 Page 2, Line 6 Page 2, Line 6 Page 2, Line 6 Page 2, Line 6 Page 3, Line 6 Page 3, Line 6 Page 3, Line 6 Page 3, Line 6 Page 2, Line 6 Page 2, Line 6 Page 2, Line 13 Page 2, Line 14 Page 2, Line 16	,
ALLOC	EXP929 EXP930 EXP930 EXP931 ILABPO ILABPM ILABDM ILABDM ILABDM ILABDM ILABCA ILT3670 ILT367CS ILT3	OTHOMINE
INTERNALLY DEVELOPED CONT-39	Acct 929-Duplicate Charges-Cr 2 Acct 930-Miscellaneous General Exp 3 Acct 931 Rents 4 Acct 932 Maintenance of General Plant 5 Total LPG Gas Maintenance Labor 7 Total LPG Gas Maintenance Labor 7 Total LPG Gas Maintenance Labor 8 Tot LNG Gas Maintenance Labor 1 Total LNG Gas Maintenance Labor 1 Total Transm & Distr Operating Labor 1 Total Sales Expense Labor 1 Total Sales Expense Labor 1 Total Sales Expense Labor 2 Total Sales Revenues less Gas Costs 15 Sales Expense Accounts 912 to 913 6 Acct 367 Mains and Acct 380 Services 1 Acct 381, 382 & 383 - Meters & Hse Reg 19 Transm & Distr Oper Accts 851 to 879 20 Total Customer Deposits 21 Acct 387 Mains and Accts 851 to 879 20 Total Customer Deposits 22 Acct 360-4Uncollectible Accts-Other Rev 23 Acct 367-Gas Mains - Oonted Steel 24 Acct 367-Gas Mains - Coatted Steel 25 Acct 367-Gas Mains - Coatted Steel 26 Acct 367-Gas Mains - Plastic 27 Acct 397-Comm Equip Metscan 28 Acct 397-Comm Equip Metscan 39 Acct 397-Comm Equip Metscan 30 Acct 305 St & Impr-LNG & LPG Dir Csts 30 Acct 305 Deposition & Maintenance Labor 31 Acct 397-Comm Equip Metscan 32 Acct 307-Comm Equip Metscan 33 Acct 307-Comm Equip Metscan 34 Acct 307-Comm Equip Metscan 35 Acct 307-Comm Equip Metscan 36 Acct 307-Comm Equip Metscan 37 Acct 307-Comm Equip Metscan 38 Acct 307-Comm Equip Metscan 39 Acct 307-Comm Equip Metscan 30 Acct 307-Comm Equip Metscan 31 Acct 307-Comm Equip Metscan 32 Acct 307-Comm Equip Metscan 33 Acct 307-Comm Equip Metscan 34 Acct 307-Comm Equip Metscan 35 Acct 307-Comm Equip Metscan 36 Acct 307-Comm Equip Metscan 37 Acct 307-Comm Equip Metscan 38 Acct 307-Comm Equip Metscan 39 Acct 307-Comm Equip Metscan 30 Acct 307-Comm Equip Metscan 31 Acct 307-Comm Equip Metscan 32 Acct 307-Comm Equip Metscan 33 Acct 307-Comm Equip Metscan	_

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

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HIGH WINTER HIGH ANNUAL G-42 & T-42	0.00000	8 6 6 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	State Gas Company D.T.E. 05-27 chment AG-22-44(1) Page 88 of 322
HIGH WINTER MED ANNUAL G-41 & T-41	0.00000	0.08446 0.07642 0.01666 0.08446 0.07687 0.08446 0.01305 0.08489	
HIGH WINTER LOW ANNUAL G-40 & T-40	0.00000	0.06732 0.06190 0.05910 0.06683 0.06732 0.06732 0.06173 0.06683 0.06377	
OUTDOOR LIGHTING	0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	
RESIDENTIAL NON-HEATING R-1 & R-2	0.00000	0.05350 0.05963 0.11808 0.05492 0.05350 0.05347 0.01105 0.05492 0.06628	
RESIDENTIAL HEATING R-3 & R-4	0.00000	0.59128 0.53122 0.78471 0.58604 0.59128 0.57496 0.59604 0.60290	
TOTAL	0.00000	0.97455 0.86070 1.00000 0.96181 0.97455 0.93032 0.97555 0.45855 0.9555 0.9553	
ALLOC	GASCOSTS EXP903T	BASIS1P BASIS1OM BASIS10 BASIS2 BASIS7P BASIS7P BASIS7OM BASIS9 BASIS9 BASIS9	
DELIVERY COMPONENTS INTERNALLY DEVELOPED CONT-40	1 Total Gas Supply Expense 2 Acct 903-Cust Records & Coll Subtotal 3	NiSource Service Charges Allocators   10	

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 89 of 322

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	LOW WINTER LRG HI ANNUAL G-53 & T-53	0.00000	0.04299 0.03125 0.00024 0.04201 0.04313 0.04313 0.04313 0.04313 0.04310 0.03109
	LOW WINTER L HIGH ANNUAL LF G-52 & T-52	0.00000	0.02521 0.01880 0.00089 0.02342 0.02342 0.02531 0.0248 0.02342 0.01856
S COMPANY FRVICE STUDY ECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51	0.00000	0.02637 0.02304 0.00624 0.02739 0.02637 0.02637 0.00427 0.00427
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50	0.00000	0.01293 0.01298 0.01179 0.01370 0.01299 0.01290 0.01294 0.01294
	HIGH WINTER LRG HI ANNUAL G-43 & T-43	0.00000	0.01087 0.00792 0.00005 0.01015 0.01087 0.00926 0.01091 0.01015 0.01015
11:19 AM	ALLOC	GASCOSTS EXP903T	BASIS 1P BASIS 10M BASIS 10 BASIS 11 BASIS 2 BASIS 2 BASIS 3 BASIS 7 BASIS 9 BASIS 9 BASIS 9
30-Jun-05	DELIVERY COMPONENTS INTERNALLY DEVELOPED CONT-40	Total Gas Supply Expense Acct 903-Cust Records & Coll Subtotal	NiSource Service Charges Allocators. Basis 1 - 50% Gross Plant Basis 1 - 50% O&M less Gas & NIS 923 Basis 10 - Number of Annual Customers Basis 10 - Labor Basis 20 - Total Direct Billed Basis 20 - Total Direct Billed Basis 7 - 50% Deprec Plant Basis 7 - 50% O&M less NIS 923 Basis 7 - 50% O&M less NIS 923 Basis Co 12 - Oth NiSource Serv Chrgs

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 90 of 322

### DELIVERY COMPONENTS

11:19 AM

30-Jun-05

ALLOC INPUT		3ASCOSTS Page 10, Line 7	EXP903T Pg 12, Line 3 to 5	
	INTERNALLY DEVELOPED CONT-40	Total Gas Supply Expense	Acct 903-Cust Records & Coll Subtotal E	

	70M See Allocator Descriptions 9 See Allocator Descriptions 012 Page 22, Line 21
BASIS1P BASIS10M BASIS10 BASIS2 BASIS2 BASIS2 BASIS7P	BASIS7OM BASCO12
	Basis 7 - 50% O&M less NIS 923  Basis Co 12 - Oth NiSource Serv Chrgs  Basis Co 12 - Oth NiSource Serv Chrgs  1  1  1  1  1  1  1  1  1  1  1  1  1
7 8 8 6 0 1 1 2 1 2 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	0.01.01.01.01.01.01.01.01.01.01.01.01.01

2	12 Basis 1 - 50% Gross Plant	BASIS1P	۵
3	13 Basis 1 - 50% O&M less Gas & NIS 923	BASIS10M	Ś
4	14 Basis 10 - Number of Annual Customers	BASIS10	σ.
5	15 Basis 11 - Labor	BASIS11	۵
16	16 Basis 2 - Gross Plant	BASIS2	<u>α</u>
1	17 Basis 20 - Total Direct Billed	BASIS20	۵
18	18 Basis 7 - 50% Deprec Plant	BASIS7P	۵
19	Basis 7 - 50% O&M less NIS 923	BASIS70M	Ś
20	20 Basis 9 - Labor	BASIS9	Ś

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BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004	
	30-Jun-05 11:19 AM		

HIGH WINTER HIGH ANNUAL G-42 & T-42	0.04663	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 91 of 322	SI OF SERVICE
HIGH WINTER MED ANNUAL G-41 & T-41	0.09792		טי פואיו.אופ
HIGH WINTER LOW ANNUAL G-40 & T-40	0.06674		
OUTDOOR	0.00001		
RESIDENTIAL NON-HEATING R-1 & R-2	0.02263		Page 41-1
RESIDENTIAL HEATING R-3 & R-4	0.67571		
TOTAL	1.00000		
ALLOC			
DELIVERY COMPONENTS INTERNALLY DEVELOPED CONT-41	8	2400	6/30/2005 11:42 AM

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Page 41-2

6/30/2005 11:42 AM

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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LOW WINTER LRG HI ANNUAL G-53 & T-53

LOW WINTER HIGH ANNUAL G-52 & T-52

LOW WINTER MED ANNUAL G-51 & T-51

LOW WINTER LOW ANNUAL G-50 & T-50

HIGH WINTER LRG HI ANNUAL G-43 & T-43

ALLOC

INTERNALLY DEVELOPED CONT-41

DELIVERY COMPONENTS

0.01738

0.01883

0.03184

0.01207

0.01024

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004

11:19 AM 30-Jun-05

REVENUES FROM GAS SALES Revenues Firm Sales of Gas 

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 93 of 322 BRK7.xis COST OF SERVICE

11:19 AM

30-Jun-05

DELIVERY COMPONENTS

INTERNALLY DEVELOPED CONT-41

TOTAL COMPANY INPUT

ALLOC

REVENUES FROM GAS SALES Revenues Firm Sales of Gas

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Page 41-3

6/30/2005 11:42 AM

Sch JLH-2-1 Reconciliation to COS-3.xls Shee(1

BAY STATE GAS COMPANY	RECONCILIATION TO EXH BSG/JES-1, SCH JES-1	
	03:43 PM	
	23-Jun-05	

Line No.

23-Jun-05	03:43 PM	RECONCIL 12 MO	BAY STATE GAS COMPANY RECONCILIATION TO EXH BSG/JES-1, SCH JES-1 12 MONTHS ENDED DECEMBER 31, 2004	AS COMPANY H BSG/JES-1, DECEMBER 31	SCH JES-1 , 2004		
<u>Description</u>	Exh BSG/JES-1 Sch JES-1 Revenue Requirement	Adjustment for Weather & Deferred Gas <u>Revenues</u>	Adjustment for Special Contract Increase	Adjustment for Special Contract Revenues AG-9-2	Total COS Per Exh BSG/JLH-2 Sch JLH-2-1	Delivery COS Per Exh BSG/JLH-2 Sch JLH-2-2	Supply COS Per Exh BSG/JLH-2 Sch JLH-2-3
Total Rate Revenue	483,809,637	17,079,967	(418,748)	(404,852)	500,066,003	160,688,861	339,377,146
Other Operating Revenues	20,337,942		418,748	404,852	21,161,543	20,244,654	916,888
Total Operation Revenue	504,147,579	17,079,967	0	0	521,227,546	180,933,515	340,294,034
Operating Expenses:							
Cost of Gas	307,478,651	17,079,967			324,558,618	0	324,558,618
O&M Expense	99,528,001				99,528,001	86,286,405	13,241,598
Depreciation	28,800,958				28,800,958	28,159,831	641,127
Amortization	6,552,895				6,552,895	6,403,742	149,153
Taxes Other Than Income	10,067,165				10,067,165	9,775,438	291,729
Interest on Customer Deposits	72,506				72,506	72,506	0
Total Operating Expenses (Lines 3 through 8)	452,500,177	17,079,967	0	0	469,580,144	130,697,921	338,882,226
Operating Income Before Income Taxes (Line 1 less Line 9)	51,647,402	0	0	0	51,647,402	50,235,594	1,411,809
income Taxes	15,709,253	0	O	O	15,709,253	15,279,596	429,657
Operating Income After Income Taxes (Line 10 less Line 11)	35,938,149	OI	예	ବା	35,938,149	34,955,998	982,152
Rate Base	397,106,628				397,106,628	386,254.124	10,852,504
Return on Rate Base	9.05%				8:05%	9.05%	9.05%
Incremental Tax Rate	0.39225						

0 1 2 2 4 5 9

11

Attachment AG-22-44	HIGH WINTER HIGH ANNUAL G-42 & T-42	45,924,428 14,450,825 31,473,603	530,637 209,737 740,374	5.196.052 680 253 247.259 13.532 5,457,776	26,756,200	22,736,546 1,565,573 24,302,119	19,940,217 1,836,355 600,073 5,800 447,178 22,829,623	1,472,496	Bay State Gas Company D.T.E. 05-27 GAttachment AG-22-44(1) Page 95 of 322
Att	HIGH WINTER MED ANNUAL G-41 & T-41	66,161,719 21,070,302 45,091,417	894,538 295,926 1,190,464	7,498,880 979 503 935,120 21,786 8,457,269	37,824,612	47,400,340 2,165,860 49,566,200	42,269,138 2,855,594 887,029 21,937 953,120 46,986,819	2,579,381	6.82% 1.181
	HIGH WINTER LOW ANNUAL G-40 & T-40	52,436,776 20,337,041 32,099,735	841,564 235,452 1,077,017	5,943,757 776 876 1,006,862 19,834 6,972,104	26,204,647	32,207,039 1,229,322 33,436,361	28,414,796 2,539,360 701,195 23,620 388,738 32,067,708	1,368,653	5.22% 0.905
S COMPANY RVICE STUDY ECEMBER 31, 2004	OUTDOOR LIGHTING	1,513 425 1,088	27 7 34	171 0 0 0 172	950	2,743 59 2,802	2.570 54 20 0 51 51	107	11.24% 1.947
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	RESIDENTIAL NON-HEATING R-1 & R-2	40,473,034 18,860,620 21,612,415	744,672 186,491 931,162	4,595,062 599 1,165 1,551 18,094 4,616,470	17,927,107	10,873,897 206,516 11,080,413	12,021,505 2,293,510 544,599 36 (1,688,723) 13,170,928	(2,090,515)	11.66% -2.020
12	RESIDENTIAL HEATING R-3 & R-4	459,546,304 180,382,206 279,164,098	7,312,569 2,065,294 9,377,863	52,089,307 6,803 7,703 37,964 176,895 52,318,672	236,223,289	325,718,389 8,701,919 334,420,307	283,416,094 22,094,108 6,142,343 891 6,222,459 317,875,895	16,544,412	7.00%
	TOTAL	754,551,098 283,392,262 471,158,836	11,453,614 3,408,069 14,861,682	85,522,538 11,170 11,088 3,090,784 278,310 88,913,890	397,106,628	482,977,147 16,835,677 499,812,825	424,086,621 35,353,853 10,067,167 72,506 7,309,327 476,889,474	22,923,351	5.77%
10:27 AM	ALLOC								
29-Jun-05	SUMMARY OF RESULTS	DEVELOPMENT OF RATE BASE 1 Gas Plant in Service 2 Less: Depreciation Reserve 3 Net Gas Plant in Service	ADD: 4 Cash Working Capital 5 Materials & Supplies 6 Total Additions to Net Plant	DEDUCT: 7 Deferred Taxes 8 Unamortized Pre-1971 ITC 9 Customer Contributions 10 Customer Deposits 11 Unclaimed Checks 12 Total Deductions to Net Plant	13 Total Rate Base	DEVELOPMENT OF RETURN 14 Revenues from Sales of Gas 15 Other Operating Revenues 16 Total Gas Operating Revenues	1 LESS: OPERATING EXPENSES 17 Operation & Maintenance Expense 18 Depreciation & Amortization Expense 19 Taxes Other Than Income 20 Interest on Customer Deposits 21 Income Taxes 22 Total Operating Expenses	23 Operating Income	24 Rate of Return 25 Index Rate of Return

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 96 of 322

BAY STATE GAS COMPAN	GAS COST OF SERVICE ST	12 MONTHS ENDED DECEMBER
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Attachment AG-22-44

	LOW WINTER LRG HI ANNUAL G-53 & T-53	32,523,900 9,428,961 23,094,939	362,335 150,854 513,189	3,682,254 481 53 16,653 3,708,625	19,899,502	8.661,033 1,222,052 9,883,084	5,906,021 1,207,894 426,186 391 691,676 8,232,167	1,650,917 8.30% 1.437
	LOW WINTER HIGH ANNUAL G-52 & T-52	19,092,700 5,970,559 13,122,141	220,748 88,677 309,425	2,161,746 283 114 118,452 5,672 2,286,266	11,145,300	9,184,126 637,537 9,821,663	7,702,857 774,605 249,994 2,779 300,731	790,697 7.09% 1.229
S COMPANY ERVICE STUDY DECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51	20,122,202 6,528,550 13,593,652	281,497 92,306 373,803	2,283,782 298 204 396,375 6,911 2,687,570	11,279,886	15,390,159 599,471 15,989,630	14,355,136 918,780 271,399 9,298 41,599 15,596,212	393,417 3.49% 0.604
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50	9,839,523 3,902,506 5,937,017	167,200 45,162 212,362	1,117,649 146 204 244,033 3,990 1,366,021	4,783,357	5,812,707 183,341 5,996,048	5,295,696 519,564 133,522 5,725 (38,616) 5,915,891	80,156 1.68% 0.290
	HIGH WINTER LRG HI ANNUAL G-43 & T-43	8,428,999 2,460,266 5,968,732	97,827 38,162 135,989	953,877 125 13 86,516 2,411 1,042,943	5,061,778	4,990,170 324,028 5,314,198	4.762.591 314.026 110.806 2.030 (8.885) 5,180.568	133,631 2.64% 0.457
10:27 AM	ALLOC							
29-Jun-05	SUMMARY OF RESULTS	DEVELOPMENT OF RATE BASE Gas Plant in Service Less: Depreciation Reserve Net Gas Plant in Service	ADD: Cash Working Capital Materials & Supplies Total Additions to Net Plant	DEDUCT: Deferred Taxes Unamortized Pre-1971 ITC Customer Contributions Customer Deposits Unclaimed Checks Total Deductions to Net Plant	Total Rate Base	DEVELOPMENT OF RETURN Revenues from Sales of Gas Other Operating Revenues Total Gas Operating Revenues	LESS: OPERATING EXPENSES Operation & Maintenance Expense Depreciation & Amortization Expense Taxes Other Than Income Interest on Customer Deposits Income Taxes Total Operating Expenses	Operating Income Rate of Return Index Rate of Return
		- 0 w	4 10 0	7 9 11 12 12	13	4 50	17 18 19 20 21 22	23 24 25

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 97 of 322

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29-Jun-05	05 10:27 AM	IATOT	12 RESIDENTIAL HFATING	BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004 RESIDENTIAL NON-HEATING OUTDOOR	S COMPANY RVICE STUDY ECEMBER 31, 2004 OUTDOOR	HIGH WINTER	MEH WINTER MED ANNUAL	Attachment AG-22-44 HIGH WINTER HIGH ANNI JAI
DEVELOPMENT OF RATE BASE-2 GAS PI ANT IN SERVICE	ALLOC	COMPANY	R-3 & R-4	R-1 & R-2	LIGHTING	G-40 & T-40	6-41 & 1-41	G-42 & T-42
INTANGIBLE PLANT 301 Organization Organization Adj Organization Total Account 301 303 Miss. Intangible Plant	PLANT PLANT LABOR	4,432,919 (3,743,730) 689,189 34,573,711	2,699,792 (2,280,054) 419,738 21,189,433	237,775 (200,808) 36,967 1,909,436	හ (g) <b>–</b> ව දිරි විසි	308,061 (260,167) 47,894 2,422,899	388,694 (328,264) 60,431 3,095,174	269,802 (227,856) 41,946 1,941,865
PRODUCTION PLANT 304 Land & Land Rights LNG Related LPG Related LNG & LPG Related Total Account 304	DEMLNG DEMLPG PLT304L	264,235 102,897 45,459 412,592	171,422 66,754 29,492 287,668	1,726 672 297 2,695	0000	20,643 8,039 3,551 32,232	33,264 12,953 5,723 51,940	16,675 6,494 2,869 26,038
305 Structures & Improvements LNG Related LPG Related LNG & LPG Related LNG & LPG Related Total Account 305 311 L.P. Gas Equipment	DEMLNG DEMLPG PLT305L DEMLPG	1,119,956 648,808 600,187 2,368,951 4,339,415	726,569 420,912 389,370 1,536,851 2,815,185	7,314 4,237 3,920 15,471 28,340	co co	87,493 50,686 46,888 185,067 339,003	140,987 81,676 75,555 288,219 546,273	70,678 40,945 37,876 149,499 273,850
320 Other Equipment LNG Related LPG Related LNG & LPG Related Total Account 320 321 L.N.G. Equipment Total Production Plant	DEMLNG DEMLPG PLT320L DEMLNG	577,680 175,725 65,860 819,245 15,428,067 23,368,270	374,755 114,001 42,727 531,483 10,008,921 15,160,108	3,773 1,148 430 5,350 100,757 152,612	0 0 1 17 26	45,128 13,728 5,145 64,001 1,205,269 1,825,572	72,719 22,121 8,291 103,132 1,942,183 2,941,746	36,455 11,090 4,156 51,701 973,629 1,474,717

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 98 of 322

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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Attachment AG-22-44

	LOW WINTER LRG HI ANNUAL G-53 & T-53			191,075	(161,368)	1,392,393	1,422,099			6,834	2,661	1,176	10,670	0000	28,964	16,780	15,522	61,266	112,226	000	14,838	4,545	1,703	21,187	399,002	604,352	
	LOW WINTER HIGH ANNUAL G-52 & T-52			112,168	(94,729)	814,184	831,622			3,675	1,431	632	5,738	1	3/9/61	9,024	8,34/	32,947	60,352	500	0,034	2,444	916	11,394	214,571	325,003	
S COMPANY RVICE STUDY ECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51			118,216	(99,837) 18,379	962,511	980,890			4,829	1,880	831	7,540		20,467	11,857	10,968	43,293	79,303		/cc/ni	3,211	1,204	14,972	281,948	427,056	
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50			57,806	(48,819) 8,987	480,207	489,194			1,435	559	247	2,241	•	6,084	3,525	3,261	12,870	23,574	6	3,138	955	358	4,451	83,815	126,951	
	HIGH WINTER LRG HI ANNUAL G-43 & T-43			49,520	(41,821) 7,699	365,544	373,243			3,733	1,454	642	5,829	1	15,822	9,166	8,479	33,467	61,304		8,161	2,482	930	11,574	217,955	330,127	
10:27 AM	ALLOC			PLANT	PLANT	LABOR				DEMLNG	DEMLPG	PLT304L			DEMLNG	DEMLPG	PLT305L		DEMLPG		DEMLNG	DEMLPG	PLT320L		DEMLNG		
29-Jun-05	DEVELOPMENT OF RATE BASE-2	GAS PLANT IN SERVICE	INTANGIBLE PLANT 301 Organization		Adj Organization Total Account 301	303 Misc. Intangible Plant	Total Intangible Plant	PRODUCTION PLANT	304 Land & Land Rights	LNG Related	LPG Related	LNG & LPG Related	Total Account 304	305 Structures & Improvements	) LNG Related	LPG Related	LNG & LPG Related	3 Total Account 305	311 L.P. Gas Equipment	320 Other Equipment	LNG Related	) LPG Related	' LNG & LPG Related	3 Total Account 320	321 L.N.G. Equipment	Total Production Plant	

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 99 of 322

		DEVEL OPMENT OF RATE BASE CONT-3	ALLOC	TOTAL	RESIDENTIAL HEATING R-3 & R-4	RESIDENTIAL NON-HEATING R-1 & R-2	OUTDOOR LIGHTING	HIGH WINTER LOW ANNUAL G-40 & T-40	HIGH WINTER MED ANNUAL G-41 & T-41	HIGH WINTER HIGH ANNUAL G-42 & T-42
OISTRIBUTION PLANT         DISTR         219.04 Into the Manage of the Ma		GAS PLANT IN SERVICE CON'T								
364 Land & Land Rights         DISTR         7.99,41         115,856         4.22         1         1,119         4.065         9.685           366 Rand Land & Land Rights         DISTR         2.19,41         115,578         2.22         1         1,119         4.065         2         4.065         2         4.065         4.065         4.066         <		DISTRIBUTION PLANT		4	1000	C	,	4	0000	000
396 Sfundures         DISTR         7 40 21         41,824 3         8 40 2         0         4,70 2         2.98 30         2.88 30         2	_	364 Land & Land Rights	DISTR	219,041	115,885	2,222	(	13,196	26,835	20,998
367 Cas Mainstant         DSTR         2.554.360         1.351.404         2.5910         10         153.886         312.940         1.206.199         2.652.79         1.90         1.206.199         2.652.79         1.206.199         2.652.79         1.90         1.206.199         2.652.79         1.90         1.206.199         2.652.79         1.90         1.206.199         2.652.79         1.90         1.206.199         2.652.79         1.90	~ ~	365 Right of Way 366 Structures & Improvements	DISTR	79,051 2.108.612	41,823 1.115,578	802 21,388	<b>5</b> 00	4,762 127,032	9,685	7,578 202,140
Gas Mains. Dank Siele         DISTR         2.564,359         1,514,40         2.59,10         10         15,340         2.45,779         19           Gas Mains. Dank Siele         DISTR         2.264,359         1,514,40         2.59,10         10         12,61,39         3,246         2.45,779         19           Gas Mains. Cathoric Protection         DISTR         2.560,941         3,010,877         8,333         3,22         4,68,277         1,013,741         1,40         6,880,772         1,40         6,880,772         1,40         6,880,772         1,40         1,40         1,40         1,40         1,40         1,40         1,40         1,40         1,40         1,40         1,40         1,40         1,40         1,40         1,40         1,40         1,40	2	367 Gas Mains								
Gas Mains - Joint Clamping         DISTR         5.00.007.71         1.056.319         7.8         1.206.139         2.4.27.79         1.9         2.7.79         1.9         2.7.79         1.9         2.4.77         1.9         4.97.77         1.0 <td>4</td> <td>Gas Mains - Bare Steel</td> <td>DISTR</td> <td>2,554,359</td> <td>1,351,404</td> <td>25,910</td> <td>10</td> <td>153,886</td> <td>312,940</td> <td>244,871</td>	4	Gas Mains - Bare Steel	DISTR	2,554,359	1,351,404	25,910	10	153,886	312,940	244,871
Gas Mains - Cast from DISTR         5.680.941         3.01.0837         5.7755         22         498.501         9.5729         5.70           Gas Mains - Cast from Cast Mains - Cast form of Salar Cast Mains - Cast decided Steel         DISTR         1.46.116.726         4.377.756         4.83.933         3.22         4.88.5172         1.790.1034         140           Gas Mains - Cast decided Steel         DISTR         1.65.362.1         6.70.1465         1.278.837         491         5.756.377         1.790.1034         140           Gas Mains - Cast data Cast Mains - Cast Mains - Plastic         DISTR         1.653.62.1         1.623.82.1         4.42.289         1.207         4         6.802.722         1.790.1034         140           Gas Mains - Plastic         DISTR         1.653.82.1         1.42.289         1.207         4         6.82.977         1.790.1034         140           Ald Cas Mains - Plastic         DISTR         1.653.82.149         3.142.289         1.207         4         6.82.977         1.790.034         140           386 Meass & Reg Station Equipment         DISTR         1.253.54.56         6.53.895.149         3.142.289         1.207         1.745.6004         6.188.896         1.71           380 Gas Savices         CUIST3880         1.765.200         4.243.36	· τυ	Gas Mains - Joint Clamping	DISTR	20,020,721	10,592,119	203,078	78	1,206,139	2,452,779	1,919,268
Gas Mains: Cathodic Potection         DISTR         8,246.26         4,377.756         83,933         32         498,501         1,013.74         1           Gas Mains: Cathodic Potection         DISTR         14,16,729         7,304,002         1,278,833         32         4,91         7,996,377         15,45,803         120           Gas Mains: Cathodic Potection         DISTR         1,278,822         66,701,405         1,278,833         491         7,596,377         15,45,803         120           Gas Mains: Plastic         DISTR         1,26,82         1,207         4         66,237         15,901,901         120           Total Account 307         DISTR         1,235,142         3,320         1         4         66,245,97         3,120           368 Compressor Station Equipment         DISTR         1,235,142         3,320         1         4         6,45,865         1,130           368 Compressor Station Equipment         DISTR         1,25,574         1,24,384         2,494,686         0         1,24,330         1,31         1,31         1,31         1,31         1,31         1,31         1,31         1,31         1,31         1,31         1,31         1,31         1,31         1,32         1,31         1,32         3,	ဖ	Gas Mains - Cast Iron	DISTR	5,690,941	3,010,837	57,725	22	342,848	697,209	545,557
Gas Mains - Coated Steel         DISTR         146,147,729         7,344,202         1,488,119         570         8,802,732         17,445,803         140           Gas Mains - Coated Steel         DISTR         126,075,826         66,701,406         1,278,837         491         8,802,737         15,445,803         120           Adj Gas Mains - Plastic         DISTR         1,053,621         66,701,406         1,0287         491         8,827,737         15,445,803         120           Total Account 367         105,787         1,023,621         66,703,606         21,22,89         1,207         4,823,606         296         296         296         296         296         296         296         296         296         296         296         296         296         296         47,836         47,836         47,836         47,836         47,843	~	Gas Mains - Cathodic Protection	DISTR	8,274,626	4,377,756	83,933	32	498,501	1,013,741	793,240
Gas Mains - Plastic         DISTR         126,075,826         66,701,405         1278,837         491         7,586,377         15,45,803         120           Adj Gas Mains - Plastic         DISTR         1,056,822         1,207         4         6,8475         15,46,803         120           Total Account 367         DISTR         1,056,822         163,895,149         3,142,289         1,207         1,607         1,606,206         296           368 Compressor Station Equipment         DISTR         1,235,156         6,506,592         1,25,323         48         7,44,390         1513,655         1,13           360 Cas Services         CUST380         228,746,394         166,042,757         24,946,666         0         17,767,604         6,169,869         47,744,30         1513,655         1,17           381 Gas Melers         CUST380         228,746,394         166,042,757         24,946,666         0         17,767,604         6,169,869         47,744,30         1,176,260         47,326,031         1,223,231         1,223,231         4,174,330         1,176,260         1,308,499         4,176,249         4,176,249         4,176,249         1,207         1,176,260         1,308,499         4,176,249         1,207         1,176,260         1,308,499         4,177,398 <td>ω</td> <td>Gas Mains - Coated Steel</td> <td>DISTR</td> <td>146,116,729</td> <td>77,304,202</td> <td>1,482,119</td> <td>570</td> <td>8,802,732</td> <td>17,901,054</td> <td>14,007,349</td>	ω	Gas Mains - Coated Steel	DISTR	146,116,729	77,304,202	1,482,119	570	8,802,732	17,901,054	14,007,349
Adj Gas Mains - Plastic         DISTR         1 0.687 4.26         1 0.687 4.26         1 0.687 5.29         1 1.207         1 0.682 9.57         1 2.9081         1 1.01           1 10 Account 36 Trail Account 36 Trail Account 36 Trail Account 36 Trail Account 36 Compressor Station Equipment         327.266         16.326.592         1.67.373         4.8         1.66.29.97         1.51.3655         1.17.346         2.92.606         29.6         37.3         20.2         29.6         29.6         37.3         20.6         29.6         37.3         20.6         29.6         37.2         20.6         37.2         37.6         40.0         29.6         37.2         37.6         37.8         37.8         40.7         37.8         37.7         37.7         37.7         37.7	ග	Gas Mains - Plastic	DISTR	126,075,826	66,701,405	1,278,837	491	7,595,377	15,445,803	12,086,146
Total Account 367         1017         1027         1,207         1,207         1,207         1,202         296         295         37,925,006         296         <	0	Adj Gas Mains - Plastic	DISTR	1,053,621	557,426	10,687	4	63,475	129,081	101,004
368 Compressor Station Equipment         DISTR         173.1265         173.142         3.320         1         14.74         40.094           368 Meas, K Reg, Station Equipment         DISTR         12.356,156         6,536,592         1.255,323         48         744,330         1,513,655         1.1           360 Meas, K Reg, Station Equipment         CUST381         228,746,364         166,042,757         24,946,660         0         17,876,084         61,168,801         4.7           381 Gas Services         CUST381         24,915,974         16,188,301         2,394,184         0         17,876,084         61,188,801         1.7           382 Meter Installations         CUST382         4,518,411         27,552,090         4,243,357         0         2,023,106         2,386,381         1,175,793         1,175,793         1,175,70         1,176,70         1,176,70         1,176,70         1,176,70 </td <td>_</td> <td>Total Account 367</td> <td></td> <td>309,786,822</td> <td>163,895,149</td> <td>3,142,289</td> <td>1,207</td> <td>18,662,957</td> <td>37,952,606</td> <td>29,697,435</td>	_	Total Account 367		309,786,822	163,895,149	3,142,289	1,207	18,662,957	37,952,606	29,697,435
369 Meas & Reg Station Equipment         DISTR         1.255,166         6.536,562         1.255,233         48         7.44,330         1.513,555         1.1           380 Gas Services         CUST380         2.28,746,364         16,042,757         24,946,666         0         17,876,084         6,169,869         4,7           380 Gas Services         CUST382         24,517,647         15,188,301         2,339,184         0         2,023,108         2,385,891         7           381 Gas Regulators         CUST382         45,198,411         27,552,090         4,243,357         0         8,669,983         4,328,031         1,238,699           383 Gas Regulators         CUST386         14,053,382         7,435,052         142,549         65         846,639         1,303,439 <td>2</td> <td>368 Compressor Station Equipment</td> <td>DISTR</td> <td>327,265</td> <td>173,142</td> <td>3,320</td> <td>-</td> <td>19,716</td> <td>40,094</td> <td>31,373</td>	2	368 Compressor Station Equipment	DISTR	327,265	173,142	3,320	-	19,716	40,094	31,373
380 Gas Services         CUST380         228,746,364         166,042,757         24,984,666         0         17,876,084         6,168,869         4,7           381 Gas Meters         CUST381         24,915,974         15,183,301         2,339,184         0         17,876,084         6,198,869         4,7           381 Gas Meter Installations         CUST382         13,612,047         8,297,644         1,277,938         0         3,669,983         4,338,031         1,238,031         1,233,439         3,334,339         1,303,439         3,334,339         1,303,439         3,334,339         1,303,439         3,334,339         1,303,439         3,334,339         1,303,432         1,303,432	ŝ	369 Meas. & Reg. Station Equipment	DISTR	12,355,156	6,536,592	125,323	48	744,330	1,513,655	1,184,416
38 Gas Meters         CUST381         24,915,974         15,188,301         2,339,184         0         2,023,106         2,385,861         7           38 Meter Installations         CUST382         45,198,411         27,522,090         4,243,357         0         8,699,883         4,328,031         1,27,338           38 Gas Regulators         CUST386         13,612,047         8,297,644         1,277,938         0         8,669,883         4,328,031         1,303,439         3           38 Gas Regulators         CUST386         14,053,382         7,435,052         142,549         65         846,639         1,721,708         1,333,439         1,303,439         1,303,439         1,303,439         1,303,439         1,303,439         1,303,439         1,303,439         1,303,439         1,303,439         1,303,439         1,303,439         1,721,708         1,744         1,744         1,744         1,744         1,744         1,744         1,744	4	380 Gas Services	CUST380	228,746,364	166,042,757	24,984,666	0	17,876,084	6,169,869	4,778,556
382 Meter Installations         CUST382         45,198,411         27,552,090         4,243,357         0         3,669,983         4,328,031         1,22,303         1,22,303         1,22,303         1,22,303         1,22,303         1,22,303         1,22,303         1,23,303         1,23,303         1,23,303         1,23,303         1,23,303         1,23,303         1,23,303         1,23,303         1,23,303         1,23,303         1,23,303         1,23,303         1,23,303         1,303	5	381 Gas Meters	CUST381	24,915,974	15,188,301	2,339,184	0	2,023,106	2,385,861	700,742
383 Gas Regulators         CUST383         13,612,047         8,297,644         1,277,938         0         1,105,260         1,303,439         3           386 Other Property on Cust's Premises         CUST3860         14,653,382         7,435,052         142,549         55         846,639         1,721,708         1,3           Gas Water Heaters         CUST3862         14,653,62         3,01,432         5,779         2         846,639         1,721,708         1,3           Cascade Diamond Boilers         CUST3863         7,835,153         4,145,249         79,475         31         472,025         959,900         7           Conversion Burners         CUST3863         7,835,153         4,145,249         79,475         31         472,025         959,900         7           Total Conversion Burners         DISTR         1,719,559         909,746         17,442         7         1,352,989         2,751,410         2,10,667         1           Total Distribution Plant         DISTR         510,252         269,953         5,176         2         86,703,010         56,950,481         40,5           Total Transmission Plant         510,252         269,953         5,176         2         66,951,28         5,176         2         66,951,28 <td>9</td> <td>382 Meter Installations</td> <td>CUST382</td> <td>45,198,411</td> <td>27,552,090</td> <td>4,243,357</td> <td>0</td> <td>3,669,983</td> <td>4,328,031</td> <td>1,271,169</td>	9	382 Meter Installations	CUST382	45,198,411	27,552,090	4,243,357	0	3,669,983	4,328,031	1,271,169
386 Other Property on Cust's Premises         CUST3860         14,053,382         7,435,052         142,549         55         846,639         1,721,708         1,324         69,801           Gas Water Heaters         CUST3862         66,152         301,432         5,779         2         34,324         69,900         7           Cascade Diamond Boilers         CUST3863         7,835,153         4,145,249         79,475         31         472,025         959,900         7           Conversion Burners         CUST3863         7,486,288         11,881,733         227,803         88         1,352,989         2,751,410         2,1           Total Account 36         DISTR         1,719,559         909,746         17,442         7         103,594         2,701,667         1           387 Other Equipment         Fotal Distribution Plant         661,526,587         401,750,440         36,385,734         1,361         45,703,010         56,950,481         40,5           TRANSMISSION PLANT         510,252         269,953         5,176         2         2,246,587         2,176         2         30,740         62,512	~	383 Gas Regulators	CUST383	13,612,047	8,297,644	1,277,938	0	1,105,260	1,303,439	382,828
Gas Water Heaters         CUST3860         14,053,382         7,435,052         142,549         55         846,639         1,721,708         1,3           Cascade Diamond Boilers         CUST3862         569,722         301,432         5,779         2         34,324         69,901         7           Conversion Burners         CUST3863         7,835,153         4,445,249         79,475         31         472,025         959,900         7           Conversion Burners         CUST3863         1,835,188         1,445,249         79,475         31         472,025         959,900         7           Total Account 386         DISTR         1,716,559         909,746         17,442         7         103,52989         2,761,410         2,1           Total Distribution Plant         661,526,587         401,750,440         36,385,734         1,361         45,703,010         56,950,481         40,5           TRANSMISSION PLANT           379 Other Equipment         510,252         269,953         5,176         2         30,740         62,512           Total Transmission Plant         510,252         269,953         5,176         2         30,740         62,512		386 Other Property on Cust's Premises							4	1
Cascade Diamond Boilers         CUST3862         569,752         301,432         5,779         2         34,324         69,801           Conversion Burners         CUST3863         7,835,153         4,145,249         79,475         31         472,025         959,900         7           Conversion Burners         CUST3863         27,835,133         4,145,249         79,475         31         472,025         959,900         7           1 colal Account 386         DISTR         1,719,559         90,746         1,742         7         103,594         2,751,410         2,13           3 to Distribution Plant         661,526,587         401,750,440         36,385,734         1,361         45,703,010         56,950,481         40,5           TRANSMISSION PLANT         510,252         269,953         5,176         2         30,740         62,512           Total Transmission Plant         510,252         269,953         5,176         2         30,740         62,512	œ	Gas Water Heaters	CUST3860	14,053,382	7,435,052	142,549	55	846,639	1,721,708	1,347,215
Conversion Burners         CUST3863         7,835,153         4,145,249         79,475         31         472,025         959,900         7           Total Account 386         22,458,288         11,881,733         227,803         88         1,352,989         2,751,410         2,1           387 Other Equipment         DISTR         1,719,559         909,746         17,442         7         103,594         2,10,667         1           Total Distribution Plant         661,526,587         401,750,440         36,385,734         1,361         45,703,010         56,950,481         40,5           TRANSMISSION PLANT         510,252         269,953         5,176         2         30,740         62,512           Total Transmission Plant         510,252         269,953         5,176         2         30,740         62,512	6	Cascade Diamond Boilers	CUST3862	569,752	301,432	5,779	2	34,324	69,801	54,619
Total Account 386         22,458,288         11,881,733         227,803         88         1,352,989         2,751,410         2,1           387 Other Equipment         DISTR         1,719,559         909,746         17,442         7         103,594         210,667         1           Total Distribution Plant         661,526,587         401,750,440         36,385,734         1,361         45,703,010         56,950,481         40,5           TRANSMISSION PLANT         510,252         269,953         5,176         2         30,740         62,512           Total Transmission Plant         510,252         269,953         5,176         2         30,740         62,512	Č	Conversion Burners	CUST3863	7,835,153	4,145,249	79,475	31	472,025	929,900	751,110
387 Other Equipment         DISTR         1,719,559         909,746         17,442         7         103,594         210,667         1           Total Distribution Plant         DISTR         661,526,587         401,750,440         36,385,734         1,361         45,703,010         56,950,481         40,5           TRANSMISSION PLANT         DISTR         510,252         269,953         5,176         2         30,740         62,512           Total Transmission Plant         510,252         269,953         5,176         2         30,740         62,512	Σ :	Total Account 386		22,458,288	11,881,733	227,803	88	1,352,989	2,751,410	2,152,944
To the Distriction Plant 661,526,587 401,750,440 36,385,734 1,361 45,703,010 56,950,481 40,5  TRANSMISSION PLANT 510,252 269,953 5,176 2 30,740 62,512  Total Transmission Plant 510,252 269,953 5,176 2 30,740 62,512	: :	387 Other Fortinment	DISTR	1,719,559	909,746	17.442	7	103,594	210,667	164,844
TRANSMISSION PLANT         510,252         269,953         5,176         2         30,740         62,512           379 Other Equipment         510,252         269,953         5,176         2         30,740         62,512           Total Transmission Plant         510,252         269,953         5,176         2         30,740         62,512	3 2	Total Distribution Plant	· · ·	661,526,587	401,750,440	36,385,734	1,361	45,703,010	56,950,481	40,595,023
379 Other Equipment DISTR 510,252 269,953 5,176 2 30,740 62,512  Total Transmission Plant 510,252 269,953 5,176 2 30,740 62,512		TRANSMISSION PLANT								
Total Transmission Plant 5/10,252 209,953 5,176 2	4	379 Other Equipment	DISTR	510,252	269,953	5,176	2 0	30,740	62,512	48,915
	53	Total Transmission Plant		510,252	269,953	5,176	7	30,740	716,20	46,915

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

10:27 AM

29-Jun-05

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 100 of 322

24

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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	LOW WINTER RG HI ANNUAL G-53 & T-53		ļ	17,384	6,274	167,348	202,724	1,588,925	451,656	656,708	11,596,414	10,005,887	83,620	24,585,934	25,973	980,555	892,892	176,519	320,211	96,435		1,115,333	45,218	621,829	1,782,380	136,471	29,188,376		40,496	40,496
	LOW WINTER HIGH ANNUAL G-52 & T-52		į	8,744	3,156	84,171	101,965	799,185	227,170	330,306	5,832,673	5,032,682	42,058	12,366,039	13,064	493,192	1,922,133	382,655	694,148	209,051		560,982	22,743	312,763	896,488	68,641	17,141,481		20,368	20,368
S COMPANY FRVICE STUDY ECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51		1	7,511	2,711	72,309	87,595	686,554	195,155	283,755	5,010,662	4,323,416	36,131	10,623,268	11,223	423,685	2,310,269	1,022,284	1,854,457	558,492		481,921	19,538	268,685	770,144	58,967	17,715,320		17,498	17,498
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50			1,865	673	17,952	21,747	170,449	48,451	70,447	1,243,984	1,073,363	8,970	2,637,410	2,786	105,187	3,565,851	647,509	1,174,602	353,746		119,645	4,851	902'99	191,202	14,640	8,713,423		4,344	4,344
	HIGH WINTER LRG HI ANNUAL G-43 & T-43			4,400	1,588	42,355	51,308	402,146	114,311	166,208	2,934,970	2,532,419	21,164	6,222,526	6,574	248,172	203,287	49,813	90,363	27,214		282,283	11,444	157,381	451,108	34,540	7,381,938		10,249	10,249
10:27 AM	ALLOC			DISTR	DISTR	DISTR	DISTR	DISTR	DISTR	DISTR	DISTR	DISTR	DISTR		DISTR	DISTR	CUST380	CUST381	CUST382	CUST383		CUST3860	CUST3862	CUST3863		DISTR			DISTR	:
29-Jun-05	DEVELOPMENT OF RATE BASE CONT-3	GAS PLANT IN SERVICE CON'T	DISTRIBUTION PLANT	364 Land & Land Rights	365 Right of Way	366 Structures & Improvements 367 Gas Mains	Gas Mains - Bare Steel	Gas Mains - Joint Clamping	Gas Mains - Cast Iron	Gas Mains - Cathodic Protection	Gas Mains - Coated Steel	Gas Mains - Plastic	Adj Gas Mains - Plastic	Total Account 367	368 Compressor Station Equipment	369 Meas. & Reg. Station Equipment	380 Gas Services	381 Gas Meters	382 Meter Installations	383 Gas Regulators	386 Other Property on Cust's Premises	Gas Water Heaters	Cascade Diamond Boilers	Conversion Burners	Total Account 386	387 Other Equipment	Total Distribution Plant	TRANSMISSION PLANT	379 Other Equipment	Total Transmission Plant

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 101 of 322

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	DEVELOPMENT OF RATE BASE CONT-4	ALLOC	TOTAL	RESIDENTIAL HEATING R-3 & R-4	RESIDENTIAL NON-HEATING R-1 & R-2	OUTDOOR	HIGH WINTER LOW ANNUAL G-40 & T-40	HIGH WINTER MED ANNUAL G-41 & T-41	HIGH WINTER HIGH ANNUAL G-42 & T-42
	GAS PLANT IN SERVICE CON'T								
4 4 8	GENERAL PLANT 389 Land & Land Rights 390 Structures & Improvements Total General Plant	LABOR	172,321 7,303,824 7,476,144	105,612 4,476,346 4,581,957	9,517 403,375 412,892	0 4 4	12,076 511,846 523,922	15,427 653,867 669,294	9,679 410,226 419,905
	GENERAL PLANT (Equipment) 391 Office Equipment								
4	Office Equipment	LABOR	5,917,985	3,626,997	326,838	11	414,728	529,801	332,389
ιΩ	Office IT Equipment	LABOR	5,502,374	3,372,279	303,885	10	385,602	492,594	309,046
ç	Total Account 391		11,420,359	6,999,276	630,723	21	800,330	1,022,395	641,435
~	392 Transportation Equipment	LABOR	2,363,594	1,448,592	130,537	4	165,639	211,598	132,754
00	393 Stores Equipment	LABOR	50,473	30,933	2,787	0	3,537	4,519	2,835
(C)	394 Tools, Shop & Garage Equipment	LABOR	1,847,938	1,132,559	102,058	ಣ	129,502	165,435	103,791
10		LABOR	406,425	249,088	22,446	-	28,482	36,385	22,827
7	397 Communication Equipment	ABOR	12 666 897	7 763 250	699 567	24	887,686	1,133,990	711,448
- 6		ABOR	(5,266,581)	(3,227,766)	(290,863)	(10)	(369,078)	(471,485)	(295,803)
1 0		Pl T381	644,449	392,844	60,503	0	52,327	61,710	18,125
4		PLT381	2,248,171	1,370,442	211,065	0	182,545	215,277	63,228
. rc			10,292,937	6,298,770	680,272	14	753,481	939,492	496,998
<u> </u>	305	LABOR	25,220	15,457	1,393	0	1,767	2,258	1,417
7			26,406,945	16,174,675	1,570,216	44	1,882,738	2,382,081	1,402,057
8	Total Gas Plant in Service		754,551,098	459,546,304	40,473,034	1,513	52,436,776	66,161,719	45,924,428

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

10:27 AM

29-Jun-05

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 102 of 322

6/30/2005 11:11 AM

Attachment AG-22-44

DEVELOPMENT OF RATE BASE CONT-4 GAS PLANT IN SERVICE CONT GENERAL PLANT 389 Land & Land Rights 390 Structures & Improvements Total General Plant GENERAL PLANT (Equipment) 391 Office Equipment Office Equipment Office Equipment Total Account 391 392 Transportation Equipment		HIGH WINTER LRG HI ANNUAL G-43 & T-43 1,822 77,223 79,044 62,570 58,176 120,746 24,990	BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004 LOW WINTER LOW ANNUAL G-50 & T-50 G-51 & T-51 G-50 & T-50 A-797 101,445 103,839 G-51 & T-51 G-51 & T-51 G-50 & T-50 G-51 & T-51 G-50 & T-50	S. COMPANY ERVICE STUDY DECEMBER 31, 2004 LOW WINTER MED ANNUAL G-51 & T-51 4,797 203,334 208,131 208,131 153,183 317,936 65,801	LOW WIN HIGH ANN G-52 & 1	LOW WINTER LRG HI ANNUAL G-53 & T-53 6.940 294.148 301,088 301,088 459,934 95,189	
393 Stores Equipment 394 Tools, Shop & Garage Equipment 396 Power Operated Equipment	LABOR LABOR LABOR	534 19,538 4,297	701 25,667 5,645	1,405 51,445 11,315	1,189 43,517 9,571	2,033 74,422 16,368	
397 Communication Equipment Communications Equip & Metscan Communications Equip Metscan Adj Communications Equip Metscan Communications Equip ERT/ITRON Takel Account 307	LABOR LABOR PLT381 PLT381	133,926 (55,683) 1,288 4,495	175,935 (73,149) 16,748 58,425 177,958	352,639 (146,618) 26,441 92,241 324,702	298,295 (124,024) 9,897 34,527 218,696	510,136 (212,102) 4,566 15,927 318,527	
10da Account 391 398 Miscellaneous Equipment Total General Plant (Equipment)	LABOR	254,397	350 401,772	773,307	594 598,168	1,016	
Total Gas Plant In Service		8,428,999	9,839,523	20,122,202	19,092,700	32,523,900	

8

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 103 of 322

	29-Jun-05	5 10:27 AM		12	BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	S COMPANY RVICE STUDY ECEMBER 31, 2004		Α	Attachment AG-22-44
	DEVELOPMENT OF RATE BASE CONT-5	ALLOC	TOTAL	RESIDENTIAL HEATING R-3 & R-4	RESIDENTIAL NON-HEATING R-1 & R-2	OUTDOOR LIGHTING	HIGH WINTER LOW ANNUAL G-40 & T-40	HIGH WINTER MED ANNUAL G-41 & T-41	HIGH WINTER HIGH ANNUAL G-42 & T-42
	DEPRECIATION RESERVE								
τ	INTANGIBLE PLANT RESERVE 301 Organization Organization	PI T301	3 463 000	2 109 080	185 750	7	240 658	303.648	210 769
- 00 0	Adj Organization	PL T301	(2,936,755)	(1,788,580)	(157,523)	(6)	(204,087)	(257,505)	(178,740)
o 4	10tal Account 30 t 303 Misc. Intangible Plant	PLT303	18,717,328	11,471,420	1,033,720	35	1,311,696	1,675,649	1,051,277
ſζ	Total Infangible Plant Reserve		19,243,573	11,791,921	1,061,947	36	1,348,267	1,721,792	1,083,306
	PRODUCTION PLANT RESERVE								
φt	305 Structures & Improvements	PLT305	1,549,991	1,005,553	10,123	7	121,088	195,123	97,816
~	311 L.P. Gas Equipment	PL 1311	3,319,616	2,153,593	71,680	4 (	259,335	417,894	209,493
<b>∞</b> σ	320 Other Equipment	PL 1320	280,320	74 034	089,1	7 0	180,22	30,340 470 A93	276,01
» 5	321 L.N.G. Equipment Total Production Plant Reserve	175174	3,906,920	5.818.526	58.573	t (2	700,664	1.129.057	566.004
2			20010			)			
	DISTRIBUTION PLANT RESERVE								
1	365 Right of Way	PLT365	1,573	832	16	0	95	193	151
72	366 Structures & Improvements	PL.T366	1,525,122	806,878	15,470	<b>9</b>	91,880	186,846	146,204
<del>ن</del>	367 Gas Mains	PLT367	79,409,611	42,012,278	805,483	310	4,783,994	9,728,631	7,612,531
4 :	368 Compressor Station Equipment	PLT368	250,135	132,336	2,537	, ,	15,069	30,645	6/6/67
ប ព	369 Meas, & Reg. Station Equipment	PL 1309	3,030,203	00 124 612	30,003 13 561 166	<u> </u>	1970,812	9.478 876 8.48 879	240,302
2 (	381 Gas Meters	Pt. T381	10.092.102	6.151.953	947.476	0	819.450	966,382	283,832
00	382 Meter Installations	PLT382	10,511,706	6,407,736	698,866	0	853,521	1,006,562	295,633
5	383 Gas Regulators	PLT383	5,385,754	3,283,053	505,630	0	437,308	515,720	151,470
	386 Other Property on Cust's Premises								
20	Gas Water Heaters	PLT3860	2,962,994	1,567,595	30,055	12	178,504	363,002	284,045
24	Cascade Diamond Boilers	PLT3862	443,949	234,875	4,503	2	26,745	54,389	42,559
22	Conversion Burners	PLT3863	1,444,172	764,051	14,649	9	87,003	176,928	138,444
23	Total Account 386		4,851,115	2,566,520	49,207	19	292,253	594,320	465,048
54	387 Other Equipment	PLT387	371,382	196,483	3,767		22,374	45,499	35,602
25	Total Distribution Plant Reserve		240,193,554	153,606,444	16,914,504	351	17,237,778	16,869,154	11,956,735

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 104 of 322

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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Attachment AG-22-44

29-Jun-05	10:27 AM		BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	S COMPANY ERVICE STUDY ECEMBER 31, 2004			
DEVELOPMENT OF RATE BASE CONT-5	ALLOC	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53	
DEPRECIATION RESERVE							
INTANGIBLE PLANT RESERVE							
Organization	PL.T301	38,685	45,158	92,351	87,626	149,268	
Adj Organization Total Account 301	PL (30)	(32,808)	(36,230)	14.034	13.316	22.683	
303 Misc. Intangible Plant	PLT303	197,896	259,972	521,079	440,778	753,806	
Total Intangible Plant Reserve		203,775	266,834	535,113	454,094	776,489	
PRODUCTION PLANT RESERVE							
305 Structures & Improvements	PLT305	21,897	8,421	28,326	21,557	40,086	
311 L.P. Gas Equipment	PLT311	46,897	18,034	999'09	46,169	85,852	
320 Other Equipment	PLT320	4,101	1,577	5,306	4,038	7,508	
321 L.N.G. Equipment	PLT321	53,809	20,692	809'69	52,974	98,507	
Total Production Plant Reserve		126,704	48,724	163,906	124,/38	231,953	
DISTRIBUTION PLANT RESERVE				i	;	ļ	
365 Right of Way	PLT365	32	13	54	63	125	
366 Structures & Improvements	PLT366	30,634	12,984	52,300	60,880	121,040	
367 Gas Mains	PLT367	1,595,059	676,064	2,723,129	3,169,865	6,302,268	
368 Compressor Station Equipment	PLT368	5,024	2,130	8,578	9,985	19,852	
369 Meas. & Reg. Station Equipment	PLT369	73,039	30,957	124,693	145,150	288,584	
380 Gas Services	Pl.T380	110,340	1,935,471	1,253,967	1,043,294	484,644	
381 Gas Meters	PLT381	20,177	262,271	414,071	154,993	71,498	
382 Meter Installations	PLT382	21,016	273,175	431,287	161,437	74,471	
383 Gas Requiators	PLT383	10,768	139,963	220,973	82,713	38,156	
386 Other Property on Cust's Premises							
Gas Water Heaters	PLT3860	59,516	25,226	101,608	118,276	235,155	
Cascade Diamond Boilers	PL T3862	8,917	3,780	15,224	17,722	35,234	
Conversion Burners	PLT3863	29,008	12,295	49,524	57,648	114,615	
Total Account 386		97,442	41,301	166,355	193,646	385,004	
387 Other Equipment	PLT387	7,460	3,162	12,736	14,825	29,474	
Total Distribution Plant Reserve		1,970,989	3,377,491	5,408,144	5,036,850	7,815,114	

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 105 of 322

6/30/2005 11:11 AM

29-Jun-05 10:27 AM

	DEVELOPMENT OF RATE BASE CONT-6	ALLOC	TOTAL	RESIDENTIAL HEATING R-3 & R-4	RESIDENTIAL NON-HEATING R-1 & R-2	OUTDOOR LIGHTING	HIGH WINTER LOW ANNUAL G-40 & T-40	HIGH WINTER MED ANNUAL G-41 & T-41	HIGH WINTER HIGH ANNUAL G-42 & T-42
	DEPRECIATION RESERVE CONT								
₩ 0	TRANSMISSION PLANT RESERVE 379 Other Equipment Total Transmission Plant Reserve	PLT379	223,628 223,628	118,312 118,312	2,268 2,268	<del></del>	13,472 13,472	27,397 27,397	21,438 21,438
62.4	GENERAL PLANT RESERVE 390 Structures & Improvements Total General Plant Reserve	PLT390	2,188,656 2,188,656	1,341,377	120,875 120,875	4 4	153,379 153,379	195,937 195,937	122,928 122,928
ιc	GENERAL PLT RESERVE (Equipment)	PL 1391	7.652.128	4,689,813	422,612	14	536,255	685,049	429,789
) (C	392 Transportation Equipment	PLT392	1,284,999	787,547	70,968	2	90,052	115,038	72,173
7	393 Stores Equipment	PLT393	(1,968)	(1,206)	(109)	(0)	(138)	(176)	(111)
00	394 Tools, Shop & Garage Equipment	PLT394	814,696	499,308	44,994	2	57,093	72,935	45,758
ග	396 Power Operated Equipment	PLT396	174,702	107,071	9,648	0	12,243	15,640	9,812
5	397 Communication Equipment Communications Equip & Metscan	PLT3970	4,573,331	2,802,890	252,576	6	320,495	409,423	256,865
<del></del>	Communications Equip Metscan Adj	PLT3970	(2,145,215)	(1,314,753)	(118,476)	(4)	(150,335)	(192,048)	(120,488)
12	Communications Equip Metscan	PLT397M	157,481	95,997	14,785	0	12,787	15,080	4,429
13	Communications Equip ERT/ITRON	PLT397E	49,882	30,407	4,683	0	4,050	4,777	1,403
14	Total Account 397		2,635,479	1,614,541	153,568	S.	186,998	237,231	142,209
15	398 Miscellaneous Equipment	PLT398	13,955	8,553	771	0	978	1,249	784
16	Tot Gen Pit Reserve (Equipment)		12,573,991	7,705,627	702,452	23	883,481	1,126,965	700,415
17	Total Depreciation Reserve		283,392,262	180,382,206	18,860,620	425	20,337,041	21,070,302	14,450,825
19	Net Gas Plant in Service		471,158,836	279,164,098	21,612,415	1,088	32,099,735	45,091,417	31,473,603

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 106 of 322

6/30/2005 11:11 AM

	LOW WINTER .RG HI ANNUAL G-53 & T-53		17,748 17,748	88,144 88,144	308,175	51,751 (79)	32,810	7,036	184,183	(86,395)	1,116	99 257	562	499,512	9,428,961	23,094,939
	_		8,927 8,927	541	202	,261 (46)	(40) 185	4,114	969	518)	2,419	ያ አ	329	601		
_	LOW WINTER HIGH ANNUAL G-52 & T-52		8, 8,	51,541 51,541	180,202	30,261 (46	19,185	₹	107,698	(50,518)	λ,	60 365		294,409	5,970,559	13,122,141
aS COMPANY ERVICE STUDY DECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51		7,669	60,931 60,931	213,031	35,774	22,681	4,864	127,319	(59,721)	6,461	78 105	389	352,787	6,528,550	13,593,652
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50		1,904	30,399 90,399	106,283	17,848	(11,316	2,427	63,521	(29,796)	4,093	062,1	197	177,154	3,902,506	5,937,017
	HIGH WINTER LRG HI ANNUAL G-43 & T-43		4,492 4,492	23,140 23,140	80,905	13,586	8,614	1,847	48,353	(22,681)	315	001 28 087	148	131,166	2,460,266	5,968,732
10:27 AM	ALLOC		PLT379	PLT390	PLT391	PLT392	PL 1393	Pt.T396	PLT3970	PLT3970	PLT397M	PL139/E	PI T308			
29-Jun-05	DEVELOPMENT OF RATE BASE CONT-6	DEPRECIATION RESERVE CON'T	TRANSMISSION PLANT RESERVE 379 Other Equipment Total Transmission Plant Reserve	GENERAL PLANT RESERVE 390 Structures & Improvements Total General Plant Reserve	GENERAL PLT RESERVE (Equipment) 391 Office Equipment	392 Transportation Equipment	393 Stores Equipment 394 Tools, Shop & Garade Equipment	396 Power Operated Equipment	Ser communications Equip & Metscan	Communications Equip Metscan Adj	Communications Equip Metscan	Communications Equip ER I/II RON	lotal Account 397	Tot Gen Plt Reserve (Equipment)	Total Depreciation Reserve	Net Gas Plant in Service
			- 2	8 4	5	9 1	~ 8	6	10	7	12	5 ;	4 4	16	17	0

Table   Tabl	npany 05-27 44(1) of 322
RESIDENTIAL RESIDENTIAL HIGHWARPAING COUTDOOR PLICATING CA-408 R-4 R-2 LIGHTING CA-408 G-408 R-4 R-2 LIGHTING CA-408 R-4 R-2 LIGHTING CA-408 R-4 R-2 LIGHTING CA-408 R-4 R-2 LIGHTING CA-408 R-4	
RESIDENTIAL RESIDENTIAL HEATING R-3 & R-4 R-1 & R-2 LIGHTING R-3 & R-4 R-1 & R-2 LIGHTING R-3 & R-4 R-1 & R-2 R-2 R-1 & R-2 R-3 & R-4 R-3 & R-4 R-2 R-4 R-4 R-2 R-4	
RESIDENTIAL RESIDE HEATING NON-HE HEATING R-3 & R-4 R-1 & R-1 & R-3 & R-4 R-3 & R-4 R-1 & R-1 & R-3 & R-4 R-4 R-3 & R-4 R-3 & R-4 R-5 & R-4 R-3 & R-4 R-5 & R-4 R-3 & R-4 R-7 & R-7 & R-4 R-7 & R-7 & R-4 R-7 & R-7 & R-7 R-7 & R-7 R-7 & R-7 & R-7 R-	
RESIDI RESIDI HEA R.3.4 R.	
COMPANY 11,453,614 11,453,614 11,453,614 11,453,614 42,334 210,158 2,719,413 55,590 34,740 3,408,069 14,861,682 5,503,680 73,495,972 3,950,627 (558,752) 85,522,538 11,170 11,088 2,175,434 915,350 3,090,784 278,310 88,913,890	
ALLOC DISTRPLT DISTRPLT DISTRPLT DISTRPLT DISTRPLT PLT386 DISTRPLT PLT386 DISTRPLT PLANT PLANT PLANT PLANT PLANT PLANT REVCLAIM REVCLAIM	
DEVELOPMENT OF RATE BASE CONT-7 Cash Working Capital Purchased Gas 2 Other O&M 3 Total Cash Working Capital Materials & Supplies 5 Truck Stock Meters Stock Inventory-Imprest Mat Management System IC Stock Materials & Supplies 5 Truck Stock Inventory-Imprest Mat Management System IC Stock Appliances & Parts 0 Other Inventory Charges 11 Total Materials & Supplies 12 Total Additions to Net Plant Deferred Taxes Intangible Related Transmission & Distribution Related General Related Tommunications Equip Metscan Adj 16 Communications Equip Metscan Adj 17 Coustomer Deposits - Firm Customers Customer Deposits - Firm Customers Customer Deposits - Firm Customers Customer Deposits - Marketers 10 Unamortized Pre-1971 ITC 20 Customer Deposits - Marketers 11 Total Customer Deposits 12 Customer Deposits - Marketers 13 Total Customer Deposits 14 Ordal Rate Base 15 Total Rate Base	

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

10:27 AM

29-Jun-05

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 108 of 322

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 200
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Attachment AG-22-44

29-Jun-05	5 10:27 AM		BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	AS COMPANY ERVICE STUDY DECEMBER 31, 2004		
DEVELOPMENT OF RATE BASE CONT7	ALLOC 7	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53
ADDITIONS TO NET PLANT Cash Working Capital Purchased Gas Other O&M Total Cash Working Capital		0 97,827 97,827	0 167,200 167,200	0 281,497 281,497	0 220,748 220,748	
Materials & Supplies Stores Expense Undistributed Truck Stock Meters Stock Inventory-Imprest Mat Management System IC Stock Appliances & Parts Other inventory Charges Total Materials & Supplies	DISTRPLT DISTRPLT PLT3813 DISTRPLT DISTRPLT PLT386 DISTRPLT	2,293 1,569 85 2,347 30,364 1,117 38,162	2,704 1,850 1,100 2,767 35,810 473 457 457	5,500 3,763 1,737 5,629 72,840 1,906 931	5,323 3,642 650 5,448 70,495 2,219 88,677	
Total Additions to Net Plant		135,989	212,362	373,803	309,425	
DEDUCTIONS TO NET PLANT Deferred Taxes Intangible Related Production Related To control of Production Perfect of Production Related	INTPLT PRODPLT	64,894 35,370 820,643	85,054 13,602 967,802	170,543 45,755 1968 608	144,591 34,821 1905,221	er.
General Related	GENPLT	38,878 38,878 /5,908)	58,952 58,952 (7.761)	114,432	90,271	147,911
Deferred Taxes	PLANT	953,877 125	1,117,649	2,283,782	2,161,746	eri i
Customer Contributions Customer Denosits	PLT3803	13	204	204	114	
Customer Deposits - Firm Customers	CUSTDEP	83,686	148,410	259,427 136,948	73,895 44,556	
Total Customer Deposits		86,516	244,033	396,375	118,452	
Unclaimed Checks	REVCLAIM	2,411	3,990	6,911	5,672	
Total Deductions to Net Plant		1,042,943	1,366,021	2,687,570	2,286,266	3,708,625
Total Rate Base		5,061,778	4,783,357	11,279,886	11,145,300	19,899,502

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 109 of 322

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	29-Jun-05	5 10:27 AM		12	GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	RVICE STUDY ECEMBER 31, 2004				
	OPERATING REVENUES-8	ALLOC	TOTAL. COMPANY	RESIDENTIAL HEATING R-3 & R-4	RESIDENTIAL NON-HEATING R-1 & R-2	OUTDOOR	HIGH WINTER LOW ANNUAL G-40 & T-40	HIGH WINTER MED ANNUAL G-41 & T-41	HIGH WINTER HIGH ANNUAL G-42 & T-42	
	REVENUES									
	GAS OPERATING REVENUES									
₹**	SALES REVENUES Firm Sales of Gas		478,651,282	323,429,755	10,830,018	2,726	31,946,429	46,870,369	22,321,850	
. 01	Special Contracts	DISTR	2,500,200	1,322,750	25,361	10	150,623	306,305	239,679	
20 4	Special Contracts Adjustment	DISTR	1.406.917	744.340	4,240	4 rC	84,759	172,364	134,873	
120	Total Sales of Gas	· }	482,977,147	325,718,389	10,873,897	2,743	32,207,039	47,400,340	22,736,546	
	OTHER OPERATING REVENUES 487-1 ate Payment Charges									
9	High Wint Low Ann Rate G40 & T40	C487R40	236,065	0	0	0	236,065	0	0	
7	High Wint Med Ann Rate G41 & T41	C487R41	222,279	0	0	0	0	222,279	0	
œ	High Wint High Ann Rate G42 & T42	C487R42	73,676	0	0	0	0	0	73,676	
6	High Wint Lrg Ann Rate G43 & T43	C487R43	12,556	0	0	0	0	0	0	
10	Low Wint Low Ann Rate G50 & T50	C487R50	43,052	0	0	0	0	0 0	0 6	
7	Low Wint Med Ann Rate G51 & T51	C487T51	63,413	Õ	0 (	<b></b>		0	0 0	
72	Low Wint High Ann Rate G52 & T52	C487R52	23,756	0 0	0	<b>-</b>			<b>-</b>	
5 5	Low Wint Lrg Ann Rate G53 & 153	C48/R53	10,444	o c		<b>&gt;</b> 0	236.065	222.279	73,676	
<u> </u>	487-Return Check Charges	CUST487	27.736	20,434	1,226	0	2,093	1,971	653	
9	488-Rental Revenues-W/H & Conv Burn	CUST488	6,824,456	3,610,532	69,223	27	411,136	836,078	654,220	
17	882-Revenue Guardian Care & C/S	CUST882	7,690,936	4,068,950	78,012	30	463,337	942,232	737,285	
	493-Rent from Gas Property	!		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ć	¢	700	200	200	
8	Rent from Gas Property	PLANT	17,331	10,555	086	<b>~</b> •	407,1	020,1	1,033	
<u>ئ</u>	LNG Tank Lease Revenue	DEMING DISTOR 1	625,000	405,467	4,082	- c	46,020	78,079	53,442	
2 2	I/C Rents	UISTRPLI	871,002	978'976	7,01,74	<b>V</b> 6	110 200	155 207	93.970	
7	Total Account 493	1	000,010,	044,900	5,003		6 402	8 003	5 760	
23 23	903-Cust R&C, Shutoff & Turn-Off Total Other Operating Revenues	DIS IRPL	93,975 16,835,677	8,701,919	206,516	59	1,229,322	2,165,860	1,565,573	
24	Total Gas Operating Revenues		499,812,825	334,420,307	11,080,413	2,802	33,436,361	49,566,200	24,302,119	

Attachment AG-22-44

BAY STATE GAS COMPANY

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 110 of 322

6/30/2005 11:11 AM

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004

	29-Jun-05	10:27 AM		BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	S COMPANY FRVICE STUDY ECEMBER 31, 2004			Attachment AG-22-44
œ	OPERATING REVENUES-8 REVENUES	ALLOC	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53	
O	GAS OPERATING REVENUES							
- αω4π <b>α</b>	SALES REVENUES Firm Sales of Gas Special Contracts Special Contracts Special Contracts - Other Total Sales of Gas	DISTR DISTR DISTR	4,903,279 50,220 8,411 28,260 4,990,170	5,775,878 21,286 3,565 11,978 5,812,707	15,241,815 85,737 14,360 48,246 15,390,159	9,011,447 99,803 16,716 56,161 9,184,126	8,317,714 198,426 33,234 111,659 8,661,033	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	OTHER OPERATING REVENUES  487-Late Payment Charges High Wint Low Ann Rate G40 & T40 High Wint Low Ann Rate G41 & T41 High Wint Ligh Ann Rate G42 & T42 Ligh Wint Ligh Ann Rate G50 & T50 Low Wint Ligh Ann Rate G50 & T50 Low Wint Ligh Ann Rate G52 & T52 Low Wint Ligh Ann Rate G52 & T53 Total Account 487  882-Revenue Guardian Care & C/S 493-Rental Revenues-W/H & Conv Burn 882-Revenue Guardian Care & C/S 493-Rent from Gas Property LNG Tank Lease Revenue I/C Rents Total Account 493 903-Cust R&C, Shutoff & Turn-Off Total Other Operating Revenues	C487R40 C487R41 C487R43 C487R43 C487R50 C487R52 C487R53 CUST487 CUST487 CUST882 PLANT DEMING DISTRPLT	12,556 0 0 0 0 0 12,556 111 137,079 154,484 8,829. 9,725 18,749 1,049 324,028	0 0 0 0 0 0 0 0 43,052 382 382 58,101 65,478 11,469 11,469 11,469 11,237 183,341	63,413 63,413 63,413 63,413 562 234,026 263,739 11,422 23,330 35,214 2,517 599,471	23.756 23.756 23.756 2111 272.418 307.006 8.692 22.579 31,710 2.436 637,537	0 0 0 0 0 0 10,444 10,444 10,444 10,384 14,1616 610,384 14,164 38,455 55,365 4,149 1,222,052 9,883,084	

6/30/2005 11:11 AM

HIGH WINTER HIGH ANNUAL G-42 & T-42	2, 944 1, 264 1, 264	E. 05-27 2-44(1)
HIGH WINTER MED ANNUAL G-41 & T-41	5,874 60 2,521 0 26,852 35,307 1,444 1,514 1,514 1,514 1,524 16,481 51,788 3,696 0 3,311 944 1,392 38,032 35,369 324,808	
HIGH WINTER LOW ANNUAL G-40 & T-40	3,645 37 1,5664 21,910 8,392 10,228 32,138 40,499 12,959 0 2,055 0 0 0 0 2,055 17,442 179,618 20,499 21,949	
oor NG	000000 00000 +000000+++++++++++++++++++	
OUTDOOR		
RESIDENTIAL NON-HEATING R-1 & R-2	305 311 11,393 11,393 1,832 1,083 1,	
RESIDENTIAL HEATING R-3 & R-4	30,269 30,269 12,993 12,993 138,379 181,951 7,800 69,693 84,8934 266,885 0 0 17,065 0 0 17,065 0 0 17,065 1,491,606 4,867 7,175 170,229 1,491,606 1,603,279 1,491,606	
TOTAL	46,658 40,028 20,028 0 213,302 280,464 11,471 12,023 107,427 130,920 411,385 165,884 29,356 0 26,304 0 644,763 914,499 2,299,208 7,503 11,060 262,396 280,958 2,580,167	
ALLOC	TLABPO DEMLPG DEMLPG EREMAIN EREMAIN DEMLPG DEMLPG DEMLPG DEMLPG DEMLPG DEMLPG DEMLNG	
OPERATION & MAINTENANCE EXP-9 OPERATION & MAINTENANCE EXP	LIQUEFIED PROPANE GAS PRODUCTION Operation Expense 710-Supervision 717-LPG Gas Expenses 719-Handling Expense 4 723-Fuel for LPG Gas Process 5 738-Liquefied Petroleum Gas 6 738-Miscellaneous Production Exp 7 Total Operation Expense 8 740-Supervision 9 741-Maintenance of Struct & Improv 10 742-Maintenance of Production Equip 740-Supervision 9 741-Maintenance of Production Equip 742-Maintenance of Production Equip 743-Maintenance Expense 12 Total Liquefied Propane Gas Prod Exp LIQUEFIED NATURAL GAS PRODUCTION Operation Expense 13 750-Supervision 750-Supervision 754-Liquefied Natural Gas 750-Handling Expense 16 753-Vaporization Expense 1750-Maintenance 1777-Lease Expense	

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

10:27 AM

29-Jun-05

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 112 of 322

	LOW WINTER LRG HI ANNUAL G-53 & T-53			1,207		000		5.53		297		^		-			**	4,	8 759		89	0 (				7 59,462	194		ď		~
4	LOW WINTER HIGH ANNUAL G-52 & T-52			649	7	17		2 967	3,901	160	797	1 494	1891	5,721			7,210	2,30	408	1	366			8,967	12,719	31,977	104	154		3.908	``
S COMPANY ERVICE STUDY DECEMBER 31, 200-	LOW WINTER MED ANNUAL G-51 & T-51			853	6 00	900	0 6	3 898	5,125	210	220	1 963	2 303	7,518			9,474	3,032	536	0	481	0	0	11,783	16,712	42,018	137	202	4 795	4,25	47,153
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50			253	8	50.		1150	1,524	69	100	50 584 584	711	2,235			2,816	901	159	0	143	Q ·	0	3,503	4,968	12,491	14	. P	1 105	147. 147.	14,017
	HIGH WINTER LRG HI ANNUAL G-43 & T-43			699	~	283	<b>&gt;</b> C	202	3,962	162	120	1 518	2,7,5	5,812			7,324	2,343	415	0	372	0	0	9,109	12,919	32,481	106	37.	3 707	3,060	36,450
10:27 AM	ALLOC		7	TLABPO	DEMLPG	DEMLPG	FREMAIN		D CIMET	And A	L'ABRIM	DEMINO	DEWLTG		7		TLABLO	DEMLNG	DEMLNG	EREMAIN	DEMLNG	EREMAIN	EREMAIN	DEMLNG	DEMLNG		TI ABI M		DEMENG	בייייי	
29-Jun-05	OPERATION & MAINTENANCE EXP-9	OPERATION & MAINTENANCE EXP	LIQUEFIED PROPANE GAS PRODUCTION Operation Expense	710-Supervision	717-LPG Gas Expenses	719-Handling Expense	723-Fuel for LPG Gas Process	/zo-tiquelled religional cas	Total Operation Expense	walntenance	740-Supervision	741-Maintenance of Struct & Improv	/42-Maintenance of Production Equip	Total Liquefled Propane Gas Prod Exp	LIQUEFIED NATURAL GAS PRODUCTION	Operation Expense	3 750-Supervision	1 754-Liquefaction Expense	5 757-Vaporization Expense	5 758-Liquefied Natural Gas	7 759-Handling Expense	3 763-Fuel for Vaporization Expense	768-LNG Raw Materials	775-Miscellaneous Production Exp	1 777-Lease Expense	2 Total Operation Expense	Maintenance 790 Cupanicion	2 TOO Africana not Street 9 Improve	4 (81-Maintenance of Struct & Improv	/82-Maintenance of Production Equip	oral Maintenance Expense Total Liquefied Natural Gas Prod Exp

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 113 of 322

29-Jun-05	16:27 AM		5	BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	S COMPANY RVICE STUDY ECEMBER 31, 2004		4	Attachment AG-22-44
OPERATION & MAINT EXP CONT-10	ALLOC	TOTAL	RESIDENTIAL HEATING R-3 & R-4	RESIDENTIAL NON-HEATING R-1 & R-2	OUTDOOR LIGHTING	HIGH WINTER LOW ANNUAL G-40 & T-40	HIGH WINTER MED ANNUAL G-41 & T-41	HIGH WINTER HIGH ANNUAL G-42 & T-42
OTHER GAS SUPPLY EXPENSES PURCHASED GAS SUPPLY								
Gas Supply Demand Charges Base Demand Charges Remaining Demand Charges Total Demand Gas Costs	DBASE DREMAIN	6,288,067 45,807,642 52,095,709	3,862,966 31,913,800 35,776,767	300,841 232,905 533,746	169 0 169	168,590 3,906,613 4,075,203	358,374 5,828,405 6,186,779	205,273 2,289,761 2,495,034
Gas Supply Commodity Charges Base Commodity Charges Remaining Commodity Charges Total Commodity Gas Costs	EBASE EREMAIN	80,774,205 191,688,704 272,462,909	49,657,716 134,395,424 184,053,140	3,867,284 1,128,159 4,995,443	2,167 0 2,167	2,158,849 14,855,080 17,013,929	4,619,659 23,713,567 28,333,226	2,632,837 10,221,852 12,854,689
Total Gas Supply Expense		324,558,618	219,829,907	5,529,189	2,336	21,089,132	34,520,005	15,349,723
Total Production Expense		327,550,169	221,770,668	5,548,726	2,339	21,322,837	34,896,600	15,538,513

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 114 of 322

6/30/2005 11:11 AM

	LOW WINTER LRG HI ANNUAL G-53 & T-53		92,342 203,086 295,428	1,184,913 1,292,187 2,477,100	2,772,528
	LOW WINTER HIGH ANNUAL G-52 & T-52		342,813 159,796 502,609	4,357,592 933,008 5,290,600	5,793,209
S COMPANY ERVICE STUDY ECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51		638,567 543,192 1,181,759	8,208,799 2,525,235 10,734,034	11,915,793
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50		195,298 192,307 387,605	2,506,976 945,632 3,452,608	3,840,213
	HIGH WINTER LRG HI ANNUAL G-43 & T-43		122,834 537,777 660,611	1,577,413 1,678,560 3,255,973	3,916,584
10:27 AM	ALLOC		DBASE DREMAIN	EBASE EREMAIN	
29-Jun-05	OPERATION & MAINT EXP CONT-10	OTHER GAS SUPPLY EXPENSES PURCHASED GAS SUPPLY	Gas Supply Demand Charges Base Demand Charges Remaining Demand Charges Total Demand Gas Costs	Gas Supply Commodity Charges Base Commodity Charges Remaining Commodity Charges Total Commodity Gas Costs	Total Gas Supply Expense
			01		

2,849,896

5,834,815

11,970,464

3,856,465

3,958,846

Total Production Expense

450

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 115 of 322

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

HIGH WINTER HIGH ANNUAL G-42 & T-42		44,293	0	13,793	38,871	240,999	158,439	567,863	37,311	5,903	1,107,472		292	3,933	363,296	0	22,014	35,247	12,271	38,693	475,746	1,583,218
HIGH WINTER MED ANNUAL G-41 & T-41		73,541	0	17,627	49,677	308,431	539,449	725,715	60,024	7,544	1,782,009		393	5,026	464,283	0	28,133	45,509	41,781	49,449	634,573	2,416,582
HIGH WINTER LOW ANNUAL G-40 & T-40		49,599	0	899'8	24,428	255,420	457,429	356,866	40,341	3,710	1,196,462		286	2,472	228,308	0	13,834	131,854	35,428	24,316	436,499	1,632,961
OUTDOOR LIGHTING		<del>-</del>	0	ν	N	œ	0	23	*	0	37		0	0	15	0	<b>~</b>	0	0	0	17	54
RESIDENTIAL NON-HEATING R-1 & R-2		36,648	0	1,459	4,113	196,617	528,895	980'09	28,941	625	857,384		196	416	38,440	0	2,329	184,286	40,963	4,094	270,725	1,128,110
RESIDENTIAL HEATING R-3 & R-4		408,612	0	76,122	214,525	2,306,379	3,434,111	3,133,941	335,260	32,577	9,941,527		2,534	21,705	2,004,967	0	121,491	1,224,728	265,974	213,542	3,854,940	13,796,468
TOTAL		707,572	0	143,882	405,485	3,764,532	5,633,560	5,923,626	580,567	61,576	17,220,800		4,267	41,025	3,789,693	0	229,637	1,687,229	436,322	403,627	6,591,800	23,812,600
ALLOC		TLABDO	DISTR	DISTR	PLT369	PLT36780	PLT3813	CUST879	EXP8519	DISTR			TLABDM	PLT366	PLT367	PLT368	PLT369	PLT380	PLT3813	PLT387		
OPERATION & MAINT EXP CONT-11	TRANSMISSION & DISTRIBUTION EXP	Operation Expense		3 852-Communication System Exp	4 857-Measuring & Regulating Stat Exp	5 874-Mains and Services Exp	6 878-Meter & House Regulator Exp			9 881-Rents	<ol> <li>Total Operation Expense</li> </ol>	Maintenance	11 885-Supervision	12 886-Maintenance of Struct & Improv	13 887-Maintenance of Mains	14 888-Maint of Compressor Station Equip	15 889-Maint of Meas & Reg Station Equip			18 894-Maintenance of Other Equipment		20 Total Transmission and Distribution Exp

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 116 of 322

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Attachment AG-22-44

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	LOW WINTER LRG HI ANNUAL G-53 & T-53		31,305	11,419	32,181	178,106	39,911	470,123	26,767	4,887	794,699	Occ	027	3,256	300,765	0	18,225	6,586	3,091	32,033	364,176	1,158,876
	LOW WINTER HIGH ANNUAL G-52 & T-52		19,458	5,743	16,186	99,879	86,519	236,459	16,270	2,458	482,973	400	777	1,638	151,277	0	9,167	14,178	6,701	16,112	199,194	682,167
S COMPANY RVICE STUDY ECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51		24,758	4,934	13,905	90,410	231,141	203,134	19,882	2,112	590,276	7	91.	1,407	129,957	0	7,875	17,041	17,902	13,841	188,140	778,415
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50		11,380	1,225	3,452	43,363	146,403	50,432	8,958	524	265,737	ŗ	51	349	32,264	0	1,955	26,302	11,339	3,436	75,696	341,433
	HIGH WINTER LRG HI ANNUAL G-43 & T-43		976,7	2.890	8,145	44,919	11,263	118,985	6,811	1,237	202,225	Ç	550	824	76,122	0	4,613	1,499	872	8,107	92,093	294,318
10:27 AM	ALLOC		TLABDO	DISTR	PLT369	PLT36780	PLT3813	CUST879	EXP8519	DISTR			TLABDM	PL_T366	PLT367	PLT368	PLT369	PLT380	PLT3813	PLT387		
29-Jun-05	OPERATION & MAINT EXP CONT-11	TRANSMISSION & DISTRIBUTION EXP	Operation Expense 850-Operation Supervision & Engineer	851-System Control & Load Dispatch 852-Communication System Exp	857-Measuring & Regulating Stat Exp	874-Mains and Services Exp	878-Meter & House Regulator Exp	879-Customer Installations Exp	880-Other Expenses	881-Rents	Total Operation Expense	Maintenance	885-Supervision	886-Maintenance of Struct & Improv	887-Maintenance of Mains	888-Maint of Compressor Station Equip	889-Maint of Meas & Rea Station Equip	892-Maintenance of Services	893-Maint of Meters and House Regul	894-Maintenance of Other Equipment	Total Maintenance Expense	Total Transmission and Distribution Exp

HIGH WINTER HIGH ANNUAL G-42 & T-42	3,446 3,041	5,488	24,249 82 741	15,700	150	178,327	0	0 0	0	0	31,648	0 0	o c	00	0	6,769	1,799	8,315	31,255 23,605	103,390	238,205		3,128	415,7	2,873	12,110	Bagga Air	y ;	State Chane Chane	Gas Dent A	s Co .T.E. G-22 117	mpa 05- 2-44 of 3	any -27 -(1) 322
HIGH WINTER MED ANNUAL G-41 & T-41	7,790	41,493	90,209 116,064	34,583	1,132	783,467	0	<b>o</b> c	0	239,145	0	00	> c	0	0	51,151	13,593	10,626	39,943	384,625	687,458		4,301	10,090	3,964	15,477	1,144	F00,02	35,581				
HIGH WINTER LOW ANNUAL G-40 & T-40	16,527 41,749	147,828	262,113 93,102	70,215		Z6Z'11G	0	0 0	848,224	0	0	0		0	0	181,427	48,214	5,225	19,641	1.117.566	1,753,135		3,683	8,795	3,455	7,611	562	020,11	24,509				
OUTDOOR	00	0	← «	00	0	4	0	00	0	0	0	0 0	o c	0	0	0	0	0 •		- m	7		0	0	0	0	0 ~	- c	<b>-</b>				
RESIDENTIAL NON-HEATING R-1 & R-2	21,834 81,154	278,340	278,140	88,014	7,595	770,172	0	927,984	00	0	0	0	o c	0	0	198,487	52,748	088	3,307	1.185.903	2,015,064		4,292	10,460	4,109	1,281	95	0,400	20,551				
RESIDENTIAL HEATING R-3 & R-4	160,538 540,719	1,968,879	1,919,813	657,021	53,727	5,417,854	6,167,180	00	0	0	0	0		00	0	1,319,104	350,550	45,889	172,488	8 185.483	14,304,593		42,759	102,717	40,349	66,834	4,938	112,122	4,240 261,838				
TOTAL	220,334 695,743	2,489,985	2,684,835	910,424	67,947	7,500,932	6,167,180	927,984	848.224	239,145	31,648	773	109,200	12,730	3,397	1,815,897	482,572	86,737	326,029	11 447 296	19,864,305		66,710	159,642	62,710	126,327	9,334	130,571	7,065 431,788				
ALLOC	TLABCA CUST902	CUST903	CUST903C	EXP903T	CUST903		C904R3	C904R1	C904R40	C904R41	C904R42	C904R43	C904K5U	C904R52	C904R53	EXP904S	EXP904S	CUST882	PLT386	EAFBU4O			TLABSA	CUST912	CUST913	EXP879	PLT386	0.000	EXP9123				
OPERATION & MAINT EXP CONT-12	CUSTOMER ACCOUNTS EXPENSES 1 901-Supervision 2 902-Meter Reading Expenses	8	4 Collections Expense			8 Total Account 903 904-Uncollectible Accounts	9 Resid Heating Rate R-3 & R-4		11 Cutdool Lightering 12 High Wint Low Ann Rate G40 & T40		14 High Wint High Ann Rate G42 & T42		16 Low Wint Low Ann Rate G50 & 150						23 Bad Debt Expense - Rental	24 Adjust bad Debt Other Nevertues 25 Total Account 904	Tot	SALES EXPENSES	27 911-Supervision	28 912-Demonstrating & Selling Exp	29 Advertising Expense		Ad		<ul><li>33 916-Miscellaneous Sales Exp</li><li>34 Total Sales Expenses</li></ul>				

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

10:27 AM

29-Jun-05

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 118 of 322

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BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 200
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10:27 AM

29-Jun-05

Attachment AG-22-44

LOW WINTER LRG HI ANNUAL G-53 & T-53	2,229 1,526 13,279 590,503 10,241 10,24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14,219 454 97 170
LOW WINTER HIGH ANNUAL G-52 & T-52	1,456 1,625 1,625 34,954 34,937 6,573 0 0 12,723 2,723 2,723 13,044 1,196 1,648 5,043 3,462 1,773 1,77	7,064 222 13,966
LOW WINTER MED ANNUAL G-51 & T-51	2,680 5,255 15,560 31,988 36,100 11,676 11,676 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,205 200 12,026
LOW WINTER LOW ANNUAL G-50 & T-50	3,271 8,737 29,467 51,744 11,813 804 113,575 0 0 0 169,200 169,200 36,18 2,776 2,096 2,096 2,096 2,096 2,096 2,096 1,776 7,789 7,789 7,789	1,858
HIGH WINTER LRG HI ANNUAL G-43 & T-43	562 375 134 3,335 15,049 2,585 21,106 0 0 0 165 1,73 6,549 4,946 14,220 36,263 2,537 1,536 603	3,328
ALLOC	TLABCA CUST902 CUST903 CUST903 CUST9031 CUST9031 CUST9031 CUSTRPL I EXP9037 C904R3 C904R40 C904R42 C904R42 C904R43 C904R43 C904R42 C904R43 C904R42 C904R43 C904R42 C904R43 C904R42 C904R43 C904R42 C904R43 C904R53 EXP9045 CUST913 EXP9049 CUST913 EXP9049	EXP9123
OPERATION & MAINT EXP CONT-12	CUSTOMER ACCOUNTS EXPENSES 901-Supervision 902-Meter Reading Expenses 903-Cust Billing & Payment Proc Exp Cust Billing & Payment Proc Exp Collections Expense Service Customer Equipment Call Center Expenses Postage Adjustment Total Account 903 904-Uncollectible Accounts Resid Heating Rate R-3 & R-2 Outdoor Lighting High Wint Low Ann Rate G40 & T40 High Wint Low Ann Rate G41 & T51 High Wint Low Ann Rate G52 & T52 Low Wint Lig Ann Rate G52 & T52 Low Wint High Ann Rate G52 & T52 Low Wint High Ann Rate G52 & T52 Low Wint High Ann Rate G52 & T52 Low Wint Lig Ann Rate G52 & T52 Low Wint Lig Ann Rate G52 & T52 Low Wint Lig Ann Rate G52 & T53 Adjustment Bad Debt Gas Sales Adj Uncollectible Prop Rate Increase Bad Debt Expense - Cust Service Bad Debt Expense - Rental Adjust Bad Debt Other Revenues Total Account 904 Total Customer Accounts Expenses SALES EXPENSES 911-Supervision 912-Demonstrating & Selling Exp 913-Demonstrating & Selling Exp 913-Demonstrating & Selling Exp 913-Demonstrating Expense Advertising Guardian Care Advertising Guardian Care	Total Account 913 916-Miscellaneous Sales Exp

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	
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10:27 AM

29-Jun-05

Attachment AG-22-44

Control Experience   Control States	OPERATION & MAINT EXP CONT-13	ALLOC	TOTAL COMPANY	RESIDENTIAL HEATING R-3 & R-4	RESIDENTIAL NON-HEATING R-1 & R-2	OUTDOOR LIGHTING	HIGH WINTER LOW ANNUAL G-40 & T-40	HIGH WINTER MED ANNUAL G-41 & T-41	HIGH WINTER HIGH ANNUAL G-42 & T-42
PEVCLAIM   4283-155   2722-385   278-457   9   9   9   9   9   9   9   9   9	eral Salaries	REVCLAIM	1.745.741	1,109,602	113,494	4	124,409	136,656	84,881
PECULAM         428.183         2772.386         276.477         9         90.6.258         38.284           Sec.CA         FEVCLAM         428.183         2772.386         276.477         9         90.6.258         38.284         38.284           PRINCIAM         3309.418         2.484.847         255.160         8         77.181         38.284         38.284           PRINCIAM         3409.418         2.484.847         127.748         5         77.8240         224.8857         38.62.288           PRINCIAM         2.864.828         1.581.067         16.2         4         5.71.811         38.62.788         38.284         38.2	nses								-
PROCLAMM   3(38.4.124)   2(45.124)   3(47.124)   3(4	Sé	REVCLAIM	4,283,153	2,722,395	278,457	თ <u>{</u>	305,236	335,284	208,256
PACK STANIA         CSR154124         C2424750         C247.9641         (8)         CZ71511         CZ86869           PRINCIPADE         SSS4400         CSR4000	Adj	REVCLAIM	(373,735)	(237,548)	(24,297)	(F) «	(26,634) 278 602	306.028	(18,172)
PH         BASISTOM         2.564 826         1562,063         137574         6         778,240         224,893           Sis 10         BASISTOM         2.564 826         1562,063         137574         6         778,240         224,893           Sis 10         BASISTOM         2.564 826         168,180         6         7         7191           Sis 11         BASISTOM         2.664 826         168,180         7         724,894         244,184         7         244,184         24,184         1         24,248         24,184	sferred-Cr	REVCLAIM	(3,814,124)	(2,424,278)	(247,964)	(8)	(271,811)	(298,569)	(185,450)
BASISIP         2.664.826         1,575.4         5         718.240         2.44893           BASISIO         2.664.826         1,630.063         19.574         5         718.240         2.44893           BASISIO         1,462.284         1,448.827         173.016         66         62         68.94         24.414           BASISIO         1,466.284         1,448.827         173.016         62         62.426         66.934         24.414           BASISIO         1,440.020         1,772.81         5         1,772.24         4.414           PLANT         2.865.02         3.86 14.2         4.7376         6         52.426         66.97           BASISTO         1,772.64         1,772.64         1,772.64         4.7477         6         6.64         4.826         6.64           BASISTO         1,726.64         1,4776         6         6         4.4289         6.64	yed		· ·	:			i.	4 4	
BASISTAM   1,486.284   1,491.025   175.016   24   24   191.025   195.029   24   191.025   195.029   24   191.025   195.029   24   191.025   195.029   24   191.025   195.029   24   191.025   191.025   24   24   191.025   191.025   191.025   24   24   191.025   191.	ross Plt	BASIS1P	2,564,826	1,562,063	137,574	<i>۳</i> مه	178,240	224,893	156,104
BASISTIA         748.002         41.316         1         55.426         66.972           PLANI         748.002         41.316         1         44.226         66.972           PLANI         2867.523         1.702.244         1.47.722         5         66.972         20.978           PLANI         2867.523         1.702.244         1.47.722         1.47.722         5         1.61.522         2.61.979           BASISZO         2.886.024         1.81.979         1.47.724         6         50.432         28.647         2.86.674           BASISZOA         7.2.866         4.81.420         3.894         0         6.42.289         5.64.42         3.84.42         6         6.64.72         2.84.42         8.64.72	Gas Costs Basic 10	BASISTOM BASISTOM	2,554,825	1,031,038	173 016	4 69	185,037	24 414	3 231
PENCLAMN         2,687,523         1,705,004         1,7472         5         911,525         240,396           PLANT         2,687,523         1,705,004         1,74,727         6         94,305         24,935           BASISS         2,686,523         3,881,42         1,41,747         1,74,	Basis 11	BASIS11	748.092	458 488	41,316	20	52.426	66.972	42,017
PLANT         284 518         17.281         15.281         16.581         1 9772         24.948           CUSTYON         1284 518         17.281         15.281         15.281         15.281         14.289         24.488         26.647         24.948         26.647         26.647         26.647         26.647         26.647         26.647         26.647         26.647         26.647         26.647         26.647         26.647         26.647         26.667         26.647         26.647         26.667         26.647         26.667         26.677 <td>Basis 13</td> <td>REVOLAIM</td> <td>2 687 523</td> <td>1 708 204</td> <td>174.722</td> <td>- tU</td> <td>191.525</td> <td>210,379</td> <td>130,673</td>	Basis 13	REVOLAIM	2 687 523	1 708 204	174.722	- tU	191.525	210,379	130,673
BASISTO         1589/172         1.264/417         118770         0         44.885         55.647         55.647         55.647         55.643         55.643         55.643         55.6847         55.643         55.643         55.643         55.643         55.643         55.8	ties Mot	PI ANT	284.518	173.281	15.261	) <del>-</del>	19.772	24,948	17,317
BASISZ         647390         386142         34184         1         44289         55.82           BASISZO         2,886024         411,979         174757         6         203122         55.82           BASISZOM         72,596         44,11979         174757         6         6         6043         56.82           BASISZOM         72,596         44,614         1,984         0         44.99         7.346         6.357           BASISZOM         72,596         44,614         1,984         0         4,499         7.346         6.357           BASISZOM         72,596         48,614         1,984         0         4,499         6.357         7.346	lina lina	CUST903	1.599.072	1.264.417	178,750	. 0	94,935	26,647	3,524
BASISSO         2.886 00.4         1.811 979         174757         6         203 132         224942           BASISSP         72.596         44,200         1.897         0         6.937         4.896         7.349           BASISSP         72.596         44,200         1.897         0         2.419         3.091           BASISSP         72.596         48,525         21,160         1.907         0         2.419         3.091           BASISSP         3.45.25         1.218,133         1.283.16         0         2.419         3.091           BASCO12         1.22.677         1.218,133         1.244         0         1.248674         1.3637           REVCLAIM         3.28.080         2.09.780         2.1.446         0         1.58674         1.53,312           REVCLAIM         3.28.0298         2.09.780         2.1.446         0         1.58674         1.53,312           REVCLAIM         3.28.0298         2.09.787         2.1.446         0         1.58674         1.53,312           REVCLAIM         3.08.029         2.08.478         2.1.4476         1.07         0         1.58674         1.53,312           REVCLAIM         3.08.629         3.08.418 <t< td=""><td>e Basis 2</td><td>BASIS2</td><td>637,309</td><td>388,142</td><td>34,184</td><td>· <del>/-</del></td><td>44,289</td><td>55,882</td><td>38,789</td></t<>	e Basis 2	BASIS2	637,309	388,142	34,184	· <del>/-</del>	44,289	55,882	38,789
BASIS7P         72,596         46,420         3,881         0         6,947         6,547           BASIS7P         72,596         46,200         3,881         0         6,486         7,346           BASIS7OM         72,596         46,614         1,804         0         6,486         7,346           BASIS9OM         74,226         21,160         1,281         1,281         1,281         1,281         1,281         3,091         3,091           BASCO12         1,872,647         1,218,153         1,4476         0         2,419         1,286         7,346           REVCLAIM         328,029         209,349         2,14476         0         1,586         1,741           REVCLAIM         37,867         2,243         2,4476         1,475         1,4476         1,741         2,447         1,741           REVCLAIM         37,803         2,648         1,447         2,236         1,741         3,571         2,586           REVCLAIM         37,803         2,841         2,522         1,744         2,444         2,444         1,744         3,544         3,544         3,548         3,548         3,548         3,548         3,548         3,548         3,548 <th< td=""><td>e Basis 20</td><td>BASIS20</td><td>2,886,024</td><td>1,811,979</td><td>174,757</td><td>9</td><td>203,132</td><td>234,942</td><td>150,714</td></th<>	e Basis 20	BASIS20	2,886,024	1,811,979	174,757	9	203,132	234,942	150,714
BASIS7OM         72.566         48.614         1.894         0         24.95         7.346           BASIS7OM         72.566         48.614         1.894         0         24.95         7.346           BASCOT2         1,872.62         1,218.153         128.316         1.907         0         24.95         1.7431           REVCLAIM         222.672         141.532         14.476         0         1.28.64         17.431           REVCLAIM         222.672         141.532         14.476         0         1.5869         17.431           REVCLAIM         328.986         209.749         21.4476         0         1.5869         17.431           REVCLAIM         328.022         208.497         21.4476         0         1.5869         17.431           REVCLAIM         328.022         24.98         1.7440         1.9757         0         1.506         2.438           REVCLAIM         328.028         36.818         36.282         1         1.506         2.483         1.7431           REVCLAIM         1,789.88         1,4447         2         2.2482         1         1.506         2.988         1.5586           REVCLAIM         1,580.887         4.447	Deprec Pit	BASIS7P	72,596	44,200	3,891	0	5,043	6,357	4,434
BASIS9         34,525         21,160         1,907         0         2,419         3,091           BASCO12         1,872,647         1,218,153         14,476         0         1,524,19         1,5312           REVCIAIM         222,872         14,153         14,476         0         1,5869         17,431           REVCIAIM         329,986         209,749         21,476         0         15,586         17,431           REVCIAIM         328,802         209,749         21,386         1         23,577         25,878           REVCIAIM         378,802         206,487         21,386         1         20,888         17,732           REVCIAIM         378,802         206,481         24,487         24,488         1,44,025         1,7015         4         15,048         1,713           LABOR         272,475         166,994         15,048         1         10,095         24,383           EXPOR         437,330         24,416,025         1,7015         4         128,269         14,089           REVCIAIM         1,390,881         1,7015         4         1,209         1,440,025         1,440,025         1,440,025         1,440,025         1,440,025         1,440,025	Nisource Basis 7 - 50% O&M	<b>BASIS70M</b>	72,596	48,614	1,894	0	4,856	7,346	3,414
RASCO12         1,872,647         1,218,133         128,316         9         129,674         135,312           REVCLAIM         222,672         14,152         14,476         0         15,889         17,431           REVCLAIM         222,672         14,7407         19,747         0         15,889         17,431           EXPOSA         204,082         147,407         19,787         0         15,889         17,431           EXPOSA         204,082         208,487         21,326         1         26,481         22,882           REVCLAIM         558,236         20,488         36,282         1         26,481         20,088           REVCLAIM         558,236         23,488         36,282         1         26,481         20,883           EABOR         27,348         1,144,026         117,015         4         4,372         26,481         20,883           EABOR         27,247         16,684         1,548         1         26,481         20,883         26,481         20,481         20,883           EABOR         27,247         16,689         1,17,015         4         4,377         26,481         20,481         20,481         20,683         23,488         23,	e Basis 9	BASIS9	34,525	21,160	1,907	0	2,419	3,091	1,939
REVCLAIM         222 672         14,153         14,476         0         15,889         17,431           CKUCLAIM         222 672         147,677         14,476         1         23,517         25,832           EKPOCLAIM         328,039         209,498         209,497         21,454         1         25,617         25,832           REVCLAIM         328,039         208,497         21,326         14,757         1         20,883         17,13           REVCLAIM         324,318         326,292         1         26,292         1         20,841         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,848         1,7713         20,848         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888         1,7713         20,888	Outside Services Nisource Co 12	BASC012	1,872,647	1,218,153	128,316	6	129,674	135,312	84,233
REVICLAIM         222.57         17.470         17.51         23.57         23.58         23.58         23.58         23.58         23.58         23.58         23.58         23.58         23.58         23.58         23.58         23.58         23.58         23.58	utside Serv Nisource Direct Billed		0000	2 4 4	917	c	77	17 494	40.007
KEVCLAIM         2.5.3.996         2.0.3.4         3.0.3.4		KEVCLAIM	779,777	141,532	14,470	- C	13,003	17,433 05,833	10,027
REVCLAIM   224,022   147,047   13,25   14   15,05   15,05   14,0	Idiks	REVCEAIN	304.082	147 407	10,404	÷ C	15,511	7 713	3 491
REVCLAIM   37.537   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   1   2.05,728   2   2.05,728   2   2.05,728   2   2.05,728   2   2.05,728   2   2   2   2   2   2   2   2   2	Printing & inserting		204,062	208 407	21 326	o <del>-</del> -	23.377	25.678	15,949
PLACINIM		DEVOLAIM	320,029	236,497	24 158	~ t~	26.481	29,022	18 067
LABOR   272,475   166,994   15,048   1   19,095   24,383   23,1406   4,437   2   2   26,351   53,586   24,383   23,1406   4,437   2   2   26,351   53,586   24,383   23,1406   4,437   2   2   26,351   53,586   140,896   1,144,025   117,015   3   3   3   3   3   3   3   3   3		REVOLAIM	558 236	354 818	36.292	- 4	39.782	43.699	27.143
EXPRO         437,333         231,406         4437         2         26,351         53,586           EXPRO         437,333         231,406         4437         2         26,351         53,586         140,896         140,8		AROR	272,233	166 994	15.048	. —	19.095	24.393	15,304
cd         REVCLAIM         1,799,898         1,144,025         117,015         4         128,269         140,896           REVCLAIM         1,799,898         1,144,025         117,015         4         128,269         140,896           REVCLAIM         1,350,087         28,840,609         273,963         3772         3         96,213         140,896           S         CASCOSTS         1,491,704         1,010,380         25,413         11         96,213         140,514           S         CASCOSTS         1,491,704         1,010,380         25,413         11         96,928         158,657           S         DISTR         481,062         25,413         11         96,928         158,657           REVCLAIM         756,857         481,062         25,413         11         96,928         158,247           REVCLAIM         (2,418,260)         (1,537,069)         (157,216)         (5)         (622)         43,032         4691         5,153           REVCLAIM         (2,418,260)         (1,537,069)         (157,216)         (5)         (7)         4,691         5,153           PLANT         0         0         0         0         0         0         0 <td>ų.</td> <td>EXP879</td> <td>437.393</td> <td>231,406</td> <td>4,437</td> <td>· C4</td> <td>26,351</td> <td>53,586</td> <td>41,930</td>	ų.	EXP879	437.393	231,406	4,437	· C4	26,351	53,586	41,930
REVCLAIM         4,524,370         2,840,609         273,963         10         318,446         368,315           DISTR         1,350,087         858,122         87,772         3         96,213         105,684           S         GASCOSTS         1,491,704         1,010,360         25,443         11         96,28         15,687           S         CASCOSTS         1,491,704         1,010,360         25,443         11         96,28         18,539           S         DISTR         491,704         1,010,360         25,443         11         96,928         18,539           REVCLAIM         756,877         481,062         49,205         2         47,268         15,514           PENSION         (8,735)         (5,552)         (568)         (0)         (622)         47,268           REVCLAIM         (8,735)         (1,537,059)         (157,216)         (5)         (172,336)         (184,30)           REVCLAIM         (2,487,260)         (1,537,059)         (157,216)         (5)         (5)         (172,336)         (184,30)           PLANT         0         0         0         0         0         0         0           REVCLAIM         2,728,423	Direct Billed	REVCLAIM	1,799,898	1,144,025	117,015	4	128,269	140,896	87,515
REVCLAIM         1,350,087         858,122         87,772         3         96,213         105,684           DISTR         672,581         355,834         6,822         3         40,519         82,399           DISTR         672,581         355,834         6,822         3         40,519         82,399           S DISTR         1,592,83         48,270         1,616         1         1         96,928         158,557           S DISTR         1,592,83         48,270         1,616         1         4         47,268         15,547           REVCLAIM         603,837         383,798         39,256         1         4,268         16,547         47,268           REVCLAIM         (8,735)         (1,57,216)         (5)         (7)         (622)         (684)           REVCLAIM         (2,418,260)         (1,57,216)         (5)         (7)         4,691         5,153           REVCLAIM         (2,418,260)         (1,57,216)         (5)         (7)         (622)         (684)           REVCLAIM         2,728,423         1,5992,874         1,565,020         120         1,696,366         1,878,625           PLANT         0         0         0         0 <td>ct Billed</td> <td></td> <td>4,524,370</td> <td>2,840,609</td> <td>273,963</td> <td>10</td> <td>318,446</td> <td>368,315</td> <td>236,272</td>	ct Billed		4,524,370	2,840,609	273,963	10	318,446	368,315	236,272
DISTR         672,581         355,834         6,822         3         40,519         82,399           s         GASCOSTS         1,491,704         1,010,360         25,413         11         96,928         158,657           s         DISTR         1,592,83         84,770         1,616         1         1         96,928         158,657           REVCLAIM         1,56,857         491,062         49,205         2         2         59,96         147,268           REVCLAIM         (8,735)         (5,552)         (568)         (0)         (622)         (684)           REVCLAIM         (8,735)         (157,216)         (5)         (172,336)         (189,301)           REVCLAIM         (2,487,388)         15,992,874         1,565,020         120         4,691         5,153           PLANT         0         0         0         0         4,691         5,153         0           REVCLAIM         2,728,423         1,734,200         177,381         6         177,381         6         194,439         213,580           REVCLAIM         2,728,423         1,734,200         177,381         6         174,49         6,770         7,436           REVCLAIM	ed BSG	REVOLAIM	1,350,087	858,122	87,772	ಣ	96,213	105,684	65,644
S         GASCOSTS         1,401,704         1,010,360         25,413         11         96,928         15,657           S         DISTR         1,691,283         1,616         1         1,616         1         96,928         15,554           REVICLAIM         603,837         38,788         39,256         1         47,268         17,268           REVICLAIM         (8,735)         (5,552)         (568)         (0)         (622)         (622)         (684)           REVICLAIM         (8,735)         (1,57,216)         (5)         (77,236)         (157,216)         (6)         (622)         (684)           REVICLAIM         (2,418,260)         (1,537,059)         (157,216)         (5)         (772,336)         (189,301)           REVICLAIM         2,4687,388         15,992,874         1,565,020         120         1,696,366         1,878,625           PLANT         0         0         0         0         0         0           REVICLAIM         2,728,423         1,734,200         177,381         6         177,381         6         174,49         277,84           REVICLAIM         0,021         0,0381         0,051,31         0,051,31         0,051,31         0,05	control	DISTR	672,581	355,834	6,822		40,519	82,399	04,476
S DISTR         159,283         84,270         1,616         1         9,596         19,514           REVCLAIM         756,857         481,062         49,205         2         53,937         59,247           PENSION         (6,735)         (3,75)         (3,756)         (157,216)         (10,72,336)         (172,336)         (189,301)           REVCLAIM         (2,418,260)         (1,537,059)         (157,216)         (5)         (172,336)         (189,301)           REVCLAIM         (2,418,260)         (1,537,059)         (157,216)         (5)         (172,336)         (189,301)           REVCLAIM         (2,418,260)         (1,537,059)         (157,216)         (5)         (1,696,366)         (1,894,301)           PLANT         0         0         0         0         0         0           REVCLAIM         2,728,423         1,734,200         177,381         6         194,439         213,580           REVCLAIM         0,021         0,021         0,021         0,021         0,021         0,021         0,021         0,021         0,021         0,021         0,021         0,021         0,021         0,021         0,021         0,021         0,021         0,021         0,021	osts - Sales	GASCOSTS	1,491,704	1,010,360	25,413	-	96,928	128,627	P. (2.54)
REVCLAIM         756,857         481,062         49,205         2         55,957         38,744           PENSION         603,831         383,798         39,256         1         43,032         47,268           REVCLAIM         (8,736)         (1537,089)         (157,216)         (5)         (72,336)         (189,301)           REVCLAIM         (2,418,260)         (1,537,089)         (157,216)         (5)         (772,336)         (189,301)           REVCLAIM         (2,418,738)         15,992,874         1,565,020         120         1,696,366         1,878,625           PLANT         0         0         0         0         0         0           REVCLAIM         2,728,423         1,734,200         177,381         6         194,439         213,580           REVCLAIM         0         0         0         0         7,436           REVCLAIM         0         0         0         0         0           REVCLAIM         0,021         0,056,036         0         0         0           REVCLAIM         0,021         0,056,036         0         0         0         0           REVCLAIM         0,021         0,056,036         0	osts - trans	DIS IX	129,283	84,270	919,1	- (	D80'8	T 0,00	ay Eta
PENSION         603,831         383,796         38,286         1         45,032         47,200           REVCLAIM         (2,487,58)         (1,552)         (568)         (0)         (622)         (684)           REVCLAIM         (2,487,388)         (1,572,16)         (157,216)         (5)         (1,2336)         (189,301)           PLANT         24,687,388         15,992,874         1,565,020         120         0         0         0           PLANT         0         0         0         0         0         0         0           REVCLAIM         2,728,423         1,734,200         177,381         6         194,439         213,580           REVCLAIM         94,997         60,381         6,176         0         0         0           REVCLAIM         2,728,423         1,734,200         177,381         6         174,439         213,580           REVCLAIM         94,997         60,381         5,202         0         0         0         0           REVCLAIM         5,202         0         0         0         0         0         0           REVCLAIM         5,202         0         0         0         0         0	its Adj	KEVCLAIM	756,857	481,062	49,205	V 7	15,851	73,247	St
KEVCLAIM         (2,524)         (157,216)         (10)         (172,336)         (182,301)           REVCLAIM         (2,4687,388         (1,57,216)         (5)         (172,336)         (189,301)           REVCLAIM         24,687,388         15,992,874         1,565,020         120         4,691         5,153           PLANT         0         0         0         0         0         0           REVCLAIM         2,728,423         1,734,200         177,381         6         6,776         7,436           REVCLAIM         94,997         60,381         6,776         0         6,284           REVCLAIM         80,021         5,202         0         6,284	E	PENSION DI SI SI SI SI	159'500	002/190	007,80	- 3	300'Ct	(884)	ate (c) (c) F
Net Column   C.416.200   (1.537,039)   (197,216)   (19)   (17,230)   (193,207)   (193,20	r Adj	KEVCLAIM DD O A	(8,733)	(200,0)	(500)	(E)	(770)	(180 301)	e (Circle)
NEVCLAIM   24,687,388   15,992,874   1,565,020   120   1,696,366   1,878,625   1,878,625   1,878,625   1,878,625   1,878,625   1,696,366   1,878,625   1,696,366   1,878,625   1,696,366   1,878,625   1,696,365   1,878,625   1,696,365   1,878,625   1,696,365   1,878,625   1,696,365   1,878,625   1,696,365   1,878,625   1,696,365   1,878,625   1,696,365   1,878,625   1,696,365   1,878,625   1,696,365   1,878,625   1,696,365	GINE AC	DEVOLAIM	(2,410,200)	(873,755,1)	(13, 751)	() (	4 691	5 153	D A je
PLANT         0 <td>ince Onl</td> <td></td> <td>24 687 388</td> <td>15 992 874</td> <td>1.565.020</td> <td>320</td> <td>1.696,366</td> <td>1,878,625</td> <td>C 252241</td>	ince Onl		24 687 388	15 992 874	1.565.020	320	1.696,366	1,878,625	C 252241
REVCLAIM         2,728,423         1,734,200         177,381         6         194,439         213,580           REVCLAIM         94,997         60,381         6,176         0         6,770         7,436           REVCLAIM         80,021         50,862         5,202         0         6,284           REVCLAIM         80,021         5,610         0         6,284		PLANT	0	0	0	0	0	0	om E?( 22- 9 o
REVCLAIM         2,728,423         1,734,200         177,381         6         194,439         213,580           REVCLAIM         94,997         60,381         6,176         0         6,770         7,436           REVCLAIM         80,021         5,0862         5,202         0         6,284           REVCLAIM         5,002         6,264         5,793         6,284									pa )5- 44( f 3
REVCLAIM         94.997         60,381         6,176         0         7.70         7.436           REVCLAIM         80,021         5,703         6,264         5,703         6,264           REVCLAIM         30,021         4,362         5,703         6,264		REVCLAIM	2,728,423	1,734,200	177,381	မ	194,439	213,580	ny 27 (7) 222
REVCLAIM 80.021 50.862 5.202 0 5.703 0 5.204 1/	miums Adj	REVCLAIM	94,997	60,381	6,176	0 (	6,770	7,436	4,619
	Self Insurance Adjustment	REVCLAIM	80,021	50,862	5,202	<b>ɔ</b> (	5,703	6,264	5,891

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 120 of 322

6/30/2005 11:11 AM

Attachment AG-22-44																											me	D ent <i>A</i>	).T.I \G-2	om E. 0: 22-4 0 of	5-2  4(1	?7 1)	
₹.																																	
	LOW WINTER LRG HI ANNUAL G-53 & T-53		57,612	141,350 (12,334) 129,016 (125,871)	110,553	60,654 347	30,128	88,692	379	27,470 106,597	3,139	928	1,390		7,348	2.275	10,825	12,263	18,423	34,713	59,399	167,111	53.379	12,743	12,641	24,977	19,927	(908'67)	2,173	0	00 042	3,135	2,641 95,817
	LOW WINTER HIGH ANNUAL G-52 & T-52		35,578	87,291 (7,617) 79,674 (77,732)	64,899	48,937 1,300	17,617	54,772	1,417	16,126	1,843	1,312	813 35 168		4,538	0,723	6,685	7,573	11,377	17,460	36,682	98,919	26.848	26,626	6,358	15,425	12,306	(49,284)	1,342	0	900 22	55,606 1,936	1,631 59,172
S COMPANY RVICE STUDY CEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51		43,352	106,364 (9,281) 97,083 (94,716)	68,398	63,341 9,142	20,826	66,739	6,993	16,996 73.250	1,932	2,504	961	Ī	5,530	8,195 2,605	8,146	9,228	13,863	14,999	44,697	114,847	23,027	54,766	5,462	18,795	14,995	(217)	1,635	0	7	67,755	1,987 72,101
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50		25,027	61,403 (5,358) 56,045 (54,679)	33,446	38,635 17,273	10,391	38,528	18,924	8,311	944	902	480 25 445		3,192	3.090	4,703	5,327	8,003 3,786	3.724	25,803	62,357	19,333 726 ·	17,650	1,356	10,850	8,656	(34,668)	944	0	000	39,115 1,362	1,147 41,624
	HIGH WINTER LRG HI ANNUAL G-43 & T-43		15,125	37,109 (3,238) 33,871 (33,045)	28,651	21,506 79	2,909	23,284	88	7,119	813	826	365 15 350	2001	1,929	2,859	2,842	3,219	4,836	8.786	15,594	43,521	13,097	18.001	3,199	6,557	5,231	(75) (20,951)	570	0	ÇÇ	23,639 823	693 25,155
10:27 AM	ALLOC		REVCLAIM	REVCLAIM REVCLAIM REVCLAIM	BASIS1P	BASIS1OM BASIS10	BASIS11	REVCLAIM PI ANT	CUST903	BASIS2	BASIS7P	BASIS70M	BASIS9	710000	REVCLAIM	KEVCLAIM EXP903	REVCLAIM	REVCLAIM	REVCLAIM	EXP879	REVCLAIM		REVOLAIM	GASCOSTS	DISTR	REVCLAIM	PENSION	REVCLAIM REVCLAIM	REVCLAIM	PLANT		REVCLAIM REVCLAIM	REVCLAIM
29-Jun-05	OPERATION & MAINT EXP CONT-13	ADMINISTRATIVE & GENERAL EXP	Operation Expense 920-Administrative & General Salaries	921-Unice Supplies & Expenses Office Supplies & Expenses LDAC Unbilled Revenues Adj Total Account 921 922-Administrative Exp Transferred-Cr	923-Outside Services Employed Nisource Basís 1 - 50% Gross Plt	N Basis 1 - 50% O&M Ex Gas Costs Outside Services Nisource Basis 10	Outside Services Nisource Basis 11	Outside Services Nisource Basis 13 Out Serv Basis 13 - Facilities Mot	Out Serv Basis 13 - IT Billing	Outside Services Nisource Basis 2	Outside Services Nisource Basis 20 Nisource Basis 7 - 50% Deprec Pit	Nisource Basis 7 - 50% O&M	Outside Services Nisource Basis 9	Outside Serv Nisource Direct Billed	BSG Communications	Regulatory External Affairs	Finance & Accto & HR	Regulatory	Legal Energy Distr East	Nisource Retail Services	Oth Outside Service - Direct Billed	Total Out Serv - Direct Billed	Outside Services Employed BSG	NIS Gas Acr & Disnat Costs - Sales	NIS Gas Acq & Dispat Costs - Trans	Nisource Payroll & Benefits Adj	Nisource PBOP & Pension	Nisource Chantable Contr Adj DSM Inplementation Expense Adj	Customer Choice Recoveries Adj	lotal Account 923 924-Property Insurance	925-Injuries & Damages	Injuries & Damages Corporate Insurance Premiums Adj	Self Insurance Adjustment Total Account 925

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY	A WOLVE IN TINDED CENTRES OF COOL
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29-Jun-05 10:27 AM

Attachment AG-22-44

HIGH WINTER HIGH ANNUAL G-42 & T-42	507,520 41,621 244,396 793,538	17,467 16,128 33,595 34,068 (7,161)	15,073 41,981 53,611 135,486	(82,096) 17,781 8,721 133,504 2,390,811	110,611 (65,111) 45,501 2,436,311 19,823,025	19,823,025 60,041 22,110 (60,061) (24,066) (24,066)	e Gas Company g gD.T.E. 05-27 eng AG 22-44(1) Page 131 of 322
HIGH WINTER MED ANNUAL G-41 & T-41	808,945 66,341 393,469 1,268,756	28,121 25,965 54,087 0 64,849 (11,528)	24,267 67,587 86,312 461,298	27.724 22.724 29.694 320,510 3,960,962	185,249 (109,046) 76,203 4,037,165 42,073,386	42,073,386 99,002 37,447 (10,499) (35,792)	1,199 104,394 42,269,138
HIGH WINTER LOW ANNUAL G-40 & T-40	633,241 51,932 358,207 1,043,380	25,601 23,638 49,240 0 49,933 (10,495)	22,092 61,530 78,577 391,160	(237,199) (237,190) (1,174) 25,180 269,072 3,457,700	146,109 (86,006) 60,103 3,517,803 28,251,244	28,251,244 83,520 31,591 (8,836) (28,367)	1,092 84,572 28,414,796
		e F					
OUTDOOR	17 1 10 29	o <u>(</u> )	<u>)</u> -a ac	00 - 0 6 79	4 (2) 166 2,566	2,566 2 2 1 (0) (1)	0 2 2,570
RESIDENTIAL NON-HEATING R-1 & R-2	499,044 40,926 326,780 866,751	23,355 21,565 44,920 0 45,553 (9,574)	20,154 56,132 71,683 452,273	28.113 29.113 28.0 902 3.122.173	120,395 (70,870) 49,525 3,171,698 11,884,149	11,884,149 71,196 26,930 (7,549) (21,895)	996 67,679 12,021,505
RESIDENTIAL HEATING R-3 & R-4	5,538,005 454,169 3,194,839 9,187,014	228.337 210.830 439.167 0 445.354 (93.606)	197,038 548,785 700,827 2 936,603	2,350,003 (1,779,398) 96,130 189,033 2,145,196 31,328,651	1,260,137 (741,773) 518,364 31,847,015 281,980,582	281,980,582 734,028 277,643 (77,832) (248,605)	9,737 740,540 283,416,094
TOTAL COMPANY	9,036,079 741,045 5,026,451 14,803,575	359,243 331,700 690,943 700,677 (147,271)	310,000 863,406 1,102,613 4 817 413	4,017,413 (2,919,051) (185,481 310,104 3,496,560 49,286,348	2,057,046 (1,210,869) 846,177 50,132,525 421,791,388	421,791,388 1,173,418 443,840 (124,422) (408,197)	15,320 1,195,274 424,086,621
ALLOC	LABOR LABOR PENSION	REVCLAIM REVCLAIM REVCLAIM REVCLAIM REVCLAIM	REVCLAIM REVCLAIM PI T397M	PLT397M PLT397M PLT397E	GENPLT GENPLT	OMLAB OMLAB OMLAB PLANT	REVCLAIM OTHOMINF
OPERATION & MAINT EXP CONT-14	ADMIN & GENERAL EXP CON'T 926-Employees Pensions & Benefits 1 Employees Pensions & Benefits 2 Medical & Dental Benefits Adj 3 Pension & PBOP Expense 4 Total Account 926	928-Regulatory Commission Expenses 5 Regulatory Commission Expenses 6 Rate Case Expense Adj 7 Total Account 928 8 929-Duplicate Charges-Cr 930-Miscellaneous General Exp 9 Miscellaneous General Exp 10 Charitable Contributions Adj	8	Mai 7	20 Maintenance of General Plant 21 ERC Remediation Adj 22 Total Account 932 23 Total Administrative & General Exp 24 Total Gas O&M Exp Before Other Adj	ADJUSTMENTS TO O&M EXPENSES 25 Total Gas Operation & Maintenance Exp 26 Payroll - Union Adjustment 27 Payroll - Non-Union Adjustment 28 incentive Compensation Adjustment 29 Gain on Sale of Property Adjustment	<b>!</b>

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 122 of 322

6/30/2005 11:11 AM

-			BAY STATE GAS COMPANY	AS COMPANY		
29-Jun-05	35 10:27 AM		GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	ERVICE STODY JECEMBER 31, 2004	_	
OPERATION & MAINT EXP CONT-14	ALLOC	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53
ADMIN & GENERAL EXP CON'T 926-Employees Pensions & Benefits Employees Pensions & Benefits Medical & Dental Benefits Adj Pension & PBOP Expense Total Account 926	LABOR LABOR PENSION	95,537 7,835 43,548 146,921	125,505 10,293 72,059 207,857	251,559 20,630 124,822 397,011	212,793 17,451 102,440 332,683	363,912 29,844 165,880 559,635
928-Regulatory Commission Expenses Regulatory Commission Expenses	REVCLAIM	3,112	5,150	8,921	7,321	11,856
Rate Case Expense Adj Total Account 928	REVCLAIM	2,874	4,755 9.905	8,237 17,158	6,760	10,947 22,802
929-Duplicate Charges-Cr	REVCLAIM	0	0	0	0	0
Miscellaneous General Exp	REVCLAIM	6,071	10,045	17,400	14,280	23,123
Charitable Contributions Adj	REVCLAIM REVCI AIM	(1,276)	(2,111)	(3,657)	(3,001)	(4,860) 10,230
Total Account 930		7,480	12,378	21,441	17,596	28,494
931 Rents		0 20 20 20 20 20 20 20 20 20 20 20 20 20	7,00 97	77 984	177 00	886 96
Rents - General & Admin Metscan I ease Expense	PLT397M	9,553 9,631	125,194	197,655	73,985	34,129
Metscan Lease Expense Adj	PLT397M	(5,836)	(75,859)	(119,766)	(44,830)	(20,680)
Water Heater Lease Expense	PLT386	3,726	1,579	6,361	7,404	14,721
Itron Lease Payment Adj	PLT397E	620	8,059	12,723	4,763 63 793	2,197
Total Operation Expense		437,376	701,802	1,268,728	1,005,226	1,612,754
Maintenance 932 Maintenance of General Plant		;		1		į
Maintenance of General Plant	GENPLT	20,243	30,696	59,583	47,003	77,015
ERC Remediation Adj	GENPLI	(018,11) 8 327	(18,089)	24.510	19 335	31,681
Total Administrative & General Exp		445,703	714,429	1,293,238	1,024,561	1,644,434
1 Total Gas O&M Exp Before Other Adj		4,740,746	5,262,991	14,294,215	7,654,105	5,824,377
ADJUSTMENTS TO ORM EXPENSES  Total Gas Operation & Maintenance Exp		4,740,746	5,262,991	14,294,215	7,654,105	5,824,377
Payroll - Union Adjustment Payroll - Non-Union Adjustment Incentive Compensation Adjustment	OMLAB OMLAB OMLAB	11,074 . 4,189 (1,174)	16,763 6,340 (1,777)	31,009 11,729 (3,288)	25,081 9,487 (2,659)	41,703 15,774 (4,422)
Gain on Sale of Property Adjustment Farm Sales Adjustment Inflation Adjustment	PLANT REVCLAIM OTHOMINF	(4,560) 133 12,183	(5,323) 220 16,483	(10,886) 380 31,976	(10,329) 312 26,860	(17,595) 506 45,678
2 Total Adjusted Gas Oper & Maint Exp		4,762,591	5,295,696	14,355,136	7,702,857	5,906,021

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								Bay S	tate Gas Company
HIGH WINTER HIGH ANNUAL G-42 & T-42	6,848 (6,083) 764	838,234 (619,356) 218,878 219,642	4,575 5,066 3,857 35,148 48,646	165 6,266	11,607 123,217 13,148 59,890	354,386 262,269 2,192	32,098 32,098 242,751		. இ.பே. ட். 95-27 நாக்கி இ. 22-44(1) செத்த இ.இ.இ. 322
HIGH WINTER MED ANNUAL G-41 & T-41	9,865 (8,764) 1,101	1,336,077 (987,203) 348,874 349,975	9,126 10,106 7,694 70,113 97,038	211	14,833 157,468 16,803 76,537	452,897 335,174 2,801	2,061 2,061 41,020 313,429	94,460 144,556 52,920	121,553 4,928 39,932 166,412 31,410 1,911,022
HIGH WINTER LOW ANNUAL G-40 & T-40	7,819 (6,946) 873	1,045,879 (772,781) 273,098 273,971	5,663 6,272 4,774 43,510 60,219	104	7,294 77,434 8,263 37,637	222,709 164,820 1,377	20,171 20,171 908,105	60,115 122,577 44,874	59,773 2,423 19,636 81,832 15,446 1,797,710
		Ž.							
OUTDOOR LIGHTING	0 (0)	28 (21) 7	000++	00	0 10 10	4 - 0 3	¥ 0 ← 0 ⟨	000	40154
RESIDENTIAL NON-HEATING R-1 & R-2	6,035 (5,361) 673	824,236 (609,013) 215,223 215,896	473 524 399 3,637 5,034	17	1,228 13,038 1,391 6,337	37,498 27,751 232	87,474 171 3,396 1,269,221	92,632 141,728 51,884	10,064 408 3,306 13,778 2,601 1,663,565
RESIDENTIAL HEATING R-3 & R-4	68,521 (60,874) 7,647	9,146,724 (6,758,349) 2,388,375 2,396,022	47,028 52,081 39,649 361,322 500,079	912 34,583	64,057 680,014 72,561 330,520	1,955,796 1,447,420 12,096	4,562,465 8,899 177,142 8,434,972	601,457 920,240 336,884	524,915 21,281 172,442 718,638 135,643 15,643
TOTAL COMPANY	112,508 (99,952) 12,556	14,924,241 (11,027,252) 3,896,989 3,909,545	72,490 80,279 61,116 556,953 770,838	1,723 65,367	121,077 1,285,330 137,152 624,734	3,696,753 2,735,845 22,864	8,623,755 16,821 334,825 11,620,315	986,673 1,509,627 552,649	992,169 40,224 325,942 1,358,335 256,386 25,326,476
ALLOC	PLT301 PLT301	PLT303 PLT303	PLT305 PLT311 PLT320 PLT321	PLT365 PLT366	PLT367BS PLT367JC PLT367Cl PLT367CP	PLT367CS PLT367P PLT367P	PLT368 PLT369 PLT380	PLT381 PLT382 PLT383	PLT3860 PLT3862 PLT3863 PLT387
DEPRECIATION & AMORT EXPENSE-15	DEPRECIATION & AMORTIZATION EXPINATION & AMORTIZATION 301 Organization Organization Adj Organization Total Account 301	303 Misc. Intangible Plant Misc. Intangible Plant Adj Nipsco Amortization Total Account 303 Total Intangible Plant Amortization	PRODUCTION PLANT DEPRECIATION 305 Structures & Improvements 311 L.P. Gas Equipment 320 Other Equipment 321 L.N.G. Equipment Total Production Plant Depreciation	DISTRIBUTION PLANT DEPRECIATION 365 Right of Way 366 Structures & Improvements	367 Gas Mains Gas Mains - Bare Steel Gas Mains - Jorit Clamping Gas Mains - Cast Iron Gas Mains - Cathoric Protection	Gas Mains - Coated Steel Gas Mains - Plastic Adj Gas Mains - Plastic	Total Account 367 368 Compressor Station Equipment 369 Meas. & Reg. Station Equipment 380 Gas Services	381 Gas Meters 382 Meter Installations 383 Gas Regulators	360 Uther Property on Cust's Frentises Gas Water Heaters Cascade Diamond Boilers Conversion Burners Total Account 386 387 Other Equipment Total Distribution Plant Depreciation
·	- v v	4 50 0 V	8 0 0 11 12	€ <del>4</del>	15 17 18	21 20 21	22 23 24 25	26 27 28	29 32 33 34 34

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

29-Jun-05 10:27 AM

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 124 of 322

6/30/2005 11:11 AM

Color	29-Jun-05	10:27 AM	HIGH WINTER	BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004 I OW WINTER	AS COMPANY ERVICE STUDY DECEMBER 31, 2004 FOR WINTER	t LOW WINTER	i OW WINTER
PLT301 1,257 1,467 PLT303 157,792 207,288 4 PLT303 (116,590) (15,590) (153,162) (16,590) (15,590) (153,162) (15,590) (15,590) (15,590) (15,590) (15,590) (15,590) (15,590) (15,590) (15,549) (15	RECIATION & AMORT EXPENSE-15	ALLOC	LRG HI ANNUAL G-43 & T-43	G-50 & T-50	MED ANNUAL G-51 & T-51	G-52 & T-52	LRG HI ANNUAL G-53 & T-53
PLT301 1,257 1,467 PLT301 (1,117) (1,303) PLT303 (16,590) (16,590) (16,4127 11,102 11,102 11,102 11,102 11,102 11,102 11,102 11,102 11,103 11,103 11,105 11,	ECIATION & AMORTIZATION EXP						
PLT301 (1,117) (1,303) PLT303 (1,6,560) (1,6,560) (1,6,560) (1,6,560) (1,6,560) (1,6,560) (1,6,560) (1,0,244) PLT304 (1,0,244 436 436 4,188 10,890 (1,313 10,990 11,344 436 11,344 436 11,344 436 11,344 436 11,344 436 11,344 436 11,344 436 11,344 436 11,344 436 11,344 436 11,344 436 11,344	GIBLE PLANT AMORTIZATION Diganization lanization	PLT301	1,257	1,467	3,000	2,847	4,850
PLT303         157.792         207.288           PLT303         (116.590)         (15.3162)         64.127           41,202         41,202         54,127         64.127           PLT31         1,024         394         78.68         3.026           PLT321         7,868         3,026         4,188         3.026           PLT321         7,868         4,188         3.026         4,188           PLT321         7,868         4,188         3.026         4,188           PLT3221         7,868         4,188         4,188           PLT367BS         2,432         1,031         4,188           PLT367BC         2,5818         1,031         1,031           PLT367CS         2,5818         1,032         1,148           PLT367CS         12,549         3,1473         1,148           PLT367CS         1,254         3,1473         1,143           PLT367CS         1,254         1,436         1,436           PLT367         1,973         2,541         1,436           PLT381         1,105         1,1564         2,775           PLT386         6,547         1,1564         2,775           PLT387	Organization stal Account 301 first Integratible Plant	PLT301	(1,117)	(1,303) 164	(2,665)	(2,529) 318	(4,308) 541
PLT305  PLT311  PLT312  PLT321  PLT321  PLT322  PLT323  PLT324  PLT324  PLT365  PLT365  PLT365  PLT365  PLT365  PLT367  PLT368  PLT368	inso: intergraphe ream so: Intangible Plant j Nipsco Amortization stal Account 303 otal Intangible Plant Amortization	PLT303 PLT303	157,792 (116,590) 41,202 41,343	207,288 (153,162) 54,127 54,290	415,482 (306,992) 108,490 108,825	351,454 (259,683) 91,771 92,089	601,046 (444,102) 156,944 157,485
PLT320 PLT321 PLT320 PLT321 PLT322 PLT322 PLT365 PLT365 PLT365 PLT365 PLT365 PLT367 PLT368 PLT367 PLT368 PL	JCTION PLANT DEPRECIATION Structures & Improvements	PLT305	1,024	394 436	1,325	1,008	1,875
PLT365 35 PLT366 1,313 PLT366 1,313 PLT367BS 2,432 PLT367BS 2,432 PLT367CJ 2,755 PLT367CJ 2,755 PLT367CJ 2,755 PLT367CJ 2,755 PLT367CJ 2,755 PLT368 338 PLT368 6,725 PLT369 6,725 PLT369 10,327 PLT369 10,327 PLT380 10,327 PLT381 1,405 PLT382 6,547 PLT386 808 PLT386 808 PLT386 808 PLT386 808 PLT386 1,569 PLT386 808 PLT387 5,160 PLT387 5,112	Alto Coast Equipment Alto Equipment IN G. Equipment al Production Plant Depreciation	PLT320 PLT321	7,868 7,868 10,890	332 3,026 4,188	1,117 10,178 14,087	850 7,746 10,721	1,581 14,404 19,935
PLT365 35 15 15 15 15 15 15 15 15 15 15 15 15 15	BUTION PLANT DEPRECIATION						
PLT367BS         2,432         1,031           PLT367JC         2,5818         1,068           PLT367CI         2,755         1,168           PLT367CP         12,549         5,319         2,319           PLT367CP         14,255         31,473         15           PLT367CP         173,221         31,473         15           PLT367CP         1,3221         31,473         15           PLT367CP         1,3221         31,473         15           PLT367CP         1,3221         31,473         16           PLT367CP         1,3221         1,43         143           PLT368         1,973         1,973         1,43         1,43           PLT381         1,973         19,29         8,447         1,43           PLT382         6,547         1,1564         1,1564           PLT387         5,775         1,1564         1,1564           PLT387         5,04,488         36,112         66,547         1,1564	Right of Way structures & Improvements	PLT365 PLT366	35 1,313	15 557	59 2,242	69 2,609	137 5,188
PLI367AC 2.5,818 PLI367CI 2.755 PLI367CS 74,255 PLT367CS 74,255 PLT367P 54,953 PLT367P 54,953 PLT368 338 PLT368 6,725 PLT369 6,725 PLT369 6,725 PLT380 10,327 PLT381 1,973 PLT382 1,105 PLT386 808 PLT386 808 PLT386 808 PLT386 6,547 PLT386 19,929 PLT386 6,547 PLT386 19,929 PLT386 6,547 PLT386 808 PLT387 5,160 PLT387 5,160 PLT387 5,160 PLT387 6,112 66	Mains - Bare Steel	PLT367BS	2,432	1,031	4,152	4,833	9,609
PLT367CP         12.549         5,319         2           PLT367CS         74,255         31,473         15           PLT367P         459         31,473         15           PLT367P         459         195         23,292         9           PLT368         338         73,449         22         14,49         22           PLT369         6,725         10,327         181,145         11         14           PLT380         10,327         1973         25,641         6           PLT381         1,973         25,641         6           PLT382         1,105         8447         6           PLT3860         19,929         8447         6           PLT3862         808         847         6           PLT3863         6,547         2,775         7           PLT387         2,784         11,564         7           PLT387         2,448         35,112         6	: Mains - Joint Clamping : Mains - Cast Iron	PL136/3C PLT367CI	25,818 2,755	1,168	44,077	5,475	10,885
PLT3672 74,233 21,475 14,235 17,75 14,235 17,75	Mains - Cathodic Protection	PLT367CP	12,549	5,319	21,423	24,938	49,581
PLT367P 459 195 73419 22 73419 PLT368 338 143 143 143 143 143 143 143 143 143 143	Mains - Coated Stee! Mains - Plastic	PLT367P	74,235 54,953	23,292	93,818	109,209	217,128
PLT368 13.38 14.39 2.2 PLT369 6.725 2.3641 14.3 PLT380 10,327 25,641 11.362 2.3018 39,232 6.541 14.362 2.3018 39,232 6.541 14.362 2.3018 39,232 6.541 14.362 2.3018 34.362 2.3018 34.362 2.3018 2.3018 34.3018	Gas Mains - Plastic	PLT367P	459	195	784	913	1,815
PLT369 6,725 2,847 11,1564 11,1564 11,1564 11,1564 11,156 11,173 2,148	otal Account 367	0307 10	173,221	73,419	735,727	344,242	084,416
PLT380 10,327 181,145 111 PLT381 1,973 25,641 PLT382 3,018 39,232 6 PLT383 1,105 19,929 8,447 PLT3862 808 342 PLT3863 6,547 2,775 11564 PLT387 5,160 2,183	compressor station Equipment Jeas, & Red. Station Equipment	PLT369	6,725	2,851	11,482	13,366	26,573
Cust's Premises 25,641 4,973 25,641 4,05 25,641 4,05 25,641 4,05 25,641 4,05 25,641 4,05 25,641 4,05 25,641 4,05 25,641 4,05 2,004	Sas Services	PLT380	10,327	181,145	117,362	97,644	45,359
Cust's Premises 3,018 39,232 pt 14,362 cust's Premises PLT3860 19,929 8,447 cust's PLT3862 808 342 808 27,284 11,564 2,183 pt 1387 5,150 2,183 fill payed and payed an	3as Meters	PLT381	1,973	25,641	40,482	15,153	6,990
In Cust's Premises PLT3860 19,929 8,447 8,	Aeter Installations Sas Regulators	PLT382 PLT383	3,018	39,232	22,675	8,487	3,915
Boilers PLT3860 19,929 8,447 8	Other Property on Cust's Premises				200	и 6	. 02
5 PLT3863 6,547 2,775 2,775 2,775 2,7284 11,564 2,1284 2,1483 2,1483 3,1112 61	Water Heaters cade Diamond Boilers	PL 13860 PL T3862	9,929 808	8,447	34,024 1,379	38,000 1,606	3,192
5 27,284 11,304 7 5,150 2,183 2,183 01 Davenietion 23,1428 351,112 68	version Burners	PLT3863	6,547	2,775	11,177	13,011	25,868
230 488 351 112 6	otal Account 386 Other Fouldment	PLT387	5.150	2.183	46,360	10,234	20,3
20,00	Total Distribution Plant Depreciation		230,488	351,112	607,917	569,883	912,759

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 125 of 322

Page 16-1

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004	
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10:27 AM

29-Jun-05

	DEPREC & AMORT EXP CONT-16	ALLOC	TOTAL	RESIDENTIAL HEATING R-3 & R-4	RESIDENTIAL NON-HEATING R-1 & R-2	OUTDOOR LIGHTING	五元。	HIGH WINTER LOW ANNUAL G-40 & T-40	HIGH WINTER MED ANNUAL G-41 & T-41	HIGH WINTER HIGH ANNUAL G-42 & T-42
~ ~	<b>TRA</b> 373	PLT379	13,471	7,127	137 137	00		812 812	1,650 1,650	1,291
8 4	GENERAL PLANT DEPRECIATION 390 Structures & Improvements Total General Plant Depreciation	PLT390	153,380 153,380	94,003 94,003	8,471	00		10,749	13,731 13,731	8,615 8,615
i.	GENERAL PLT DEPRECIATION (Equip)	13040E	100 202	100 803	17 604	· •	20 20 40 40	27 576	. 27 663	17 202
n 40 n	Office IT Equipment	PLT391IT	1,006,797	617,043 805,736	55,603 72,607	- 00		70,556	90,132	56,548
~ 8		PLT392	327,830	200,939	18,105	1 ← 0		22,974	29,349	18,413
9	,,,,	PLT393 PLT394	5,759 81,494	3,530 49,946	318	<b>0</b> 0		404 5,711	7,296	4,577
<del></del>	396 Power Operated Equipment 397 Communication Equipment	PLT396	49,624	30,413	2,741	0		3,478	4,443	2,787
5 5		PLT3970 PLT397E	503,221 160,519	308,413 97.849	27,792 15,070	- 0		35,265 13,034	45,050 15,371	28,264 4,514
4 ;	_	PLT397M	159,243	97,071	14,950	0+		12,930	15,249	4,479
15 16 17	1 oftal Account 397 3 398 Miscellaneous Equipment 7 Tot Gen Plt Depreciation (Equip)	PLT398	0,22,903 1,261 2,603,629	303,333 773 1,594,650	51,512 70 156,154	- 0 4		88 88 186,015	73,979 113 235,080	137,269
\$	3 Adj Depreciation Exp Alloc Mgt. Fee	GENPLT	(66,837)	(40,944)	(3,912)	(0)		(4,747)	(6,019)	(3,594)
19	Adj Amortization of Metscan Devices	PLT397M	2,643,350	1,611,336	248,165	0		214,632	253,117	74,342
20	) Total Depreciation & Amortization Exp		35,353,853	22,094,108	2,293,510	54		2,539,360	2,855,594	1,836,355

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	29-Jun-05	10:27 AM		BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	S COMPANY ERVICE STUDY ECEMBER 31, 2004			
	DEPREC & AMORT EXP CONT-16	ALLOC	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53	
- 8	TRANSMISSION PLANT DEPRECIATION 379 Other Equipment Total Transmission Plant Depreciation	PLT379	271 271	115 115	462	538 538	1,069	
ω 4	GENERAL PLANT DEPRECIATION 390 Structures & Improvements Total General Plant Depreciation	PLT390	1,622 1,622	2,130 2,130	4,270 4,270	3,612 3,612	6,177	
	GENERAL PLT DEPRECIATION (Equip)							
1007	Office Equipment Office T Equipment T-tel Acquipment	PLT3910E PLT3911T	3,255 10,645 13 ann	4,276 13,984 18,260	8,571 28,029 36,600	7,250 23,709 30,960	12,399 40,547 52,946	
- ∞ :	392 Transportation Equipment	PLT392	3,466	4,553	9,127	7,720	13,203	
p	393 Stores Equipment 394 Tools, Shop & Garage Equipment 396 Power Operated Equipment	PL1393 PLT394 PLT396	65 862 525	1,132 689	2,269 1,382	1,919 1,169	3,282 3,282 1,999	
1	397 Communication Equipment	Pt.T3970	5.320	686'9	14,009	11,850	20,266	
ι ε	Communications Equip ERT/ITRON	PLT397E	321	4,172	6,586	2,465	1,137	
14	Communications Equip Metscan	PLT397M	318	4,138	6,534	2,446	1,128	
15	Total Account 397		5,960	15,299	27,129	16,761	22,532	
16	398 Miscellaneous Equipment Tot Gen Plt Depreciation (Equip)	PLT398	13 24,786	18 40,031	35 76,701	30 58,694	51 94,244	
2	Adj Depreciation Exp Alloc Mgt. Fee	GENPLT	(658)	(266)	(1,936)	(1,527)	(2,502)	
19	Adj Amortization of Metscan Devices	PLT397M	5,285	68,695	108,455	40,596	18,727	
20	Total Depreciation & Amortization Exp		314,026	519,564	918,780	774,605	1,207,894	

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004	
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29-Jun-05 10:27 AM

Attachment AG-22-44

HIGH WINTER HIGH ANNUAL G-42 & T-42	139,394 5,118 144,511	430,409 18,911 449,320 4,013 4,013 453,333	2,229 2,229 600,073	75,213 378,668	(22,747)	447,178 5,800	Bay State Gas Company  Bay State Gas Company  D.T.E. 05-27  Attachment AG-22-44(1)  Representation of 322
HIGH WINTER MED ANNUAL G-41 & T-41	222,183 8,157 230,339	620.076 27,244 647,320 5,781 0 5,781 653,101	3,589 3,589 887,029	159,542	(32,771)	953,120 21,937	46,986,819
HIGH WINTER LOW ANNUAL G-40 & T-40	173,924 6,385 180,309	491,444 21,592 513,036 4,582 0 4,582 517,618	3,267 3,267 701,195	65,686	(25,973) 18,319	388,738 23,620	32,067,708
OUTDOOR LIGHTING	တဝ က	<u> </u>	00 00	8 8	£ +	51	2,695
RESIDENTIAL NON-HEATING R-1 & R-2	137,066 5,032 142,098	379,318 16,666 395,984 3,536 0 3,536 3,536	2,980 2,980 544,599	(278,860)	(20,047)	(1,688,723)	(2.090,515)
RESIDENTIAL HEATING R-3 & R-4	1,521,052 55,842 1,576,894	4,306,923 189,233 4,496,156 40,154 40,154 4,536,310	29,139 29,139 6,142,343	1,042,243	(227,620)	6,222,459	317,875,895
TOTAL	2,481,823 91,114 2,572,937	7,071,744 310,710 7,382,454 65,931 65,931 7,448,385	45,845 45,845 10,067,167	1,229,484	(373,740)	7,309,327	476,889,474 22,923,351
ALLOC	LABOR	PLANT PLANT PLANT	REVCLAIM			TOTCDEP	
STATE & FED TAXES & OTH EXP-17	TAXES OTHER THAN INCOME Payroll Taxes 1 Payroll Taxes 2 Payroll Tax Adjustment 3 Total Payroll Taxes	Plant Related Taxes Property Taxes Property Taxes Property Taxes Property Tax Adjustment Total Property Taxes Other Taxes Other Taxes Other Taxes Other Taxes Other Taxes Total Other Taxes 10 Total Plant Related Taxes	Revenue Related Taxes 11 Other State Taxes 12 Total Revenue Related Taxes 13 Total Taxes Other Than Income	FEDERAL & STATE INCOME TAXES 14 State Tax @ 6.50% 15 Federal Tax @ 35.00%	16 Amortization of ITC 17 Deferred Tax Flowback	18 Total Income Tax Expense 19 INTEREST ON CUSTOMER DEPOSITS	20 Total Expenses 21 Net Operating Income

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 128 of 322

6/30/2005 11:11 AM

29-Jun-05	5 10:27 AM		BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	AS COMPANY ERVICE STUDY DECEMBER 31, 2004	_	
STATE & FED TAXES & OTH EXP-17	ALLOC	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53
TAXES OTHER THAN INCOME Payroll Taxes Payroll Taxes Payroll Taxes Total Payroll Taxes	LABOR LABOR	26,240 963 27,203	34,471 1,266 35,736	69,092 2,537 71,629	58,445 2,146 60,591	99,951 3,669 103,620
Plant Related Taxes Property Taxes Property Taxes Property Taxes Property Tax Adjustment Total Property Taxes	PLANT PLANT	78,998 3,471 82,468	92,217 4,052 96,269	188,588 8,286 196,874	178,939 7,862 186,801	304,818 13,393 318,211
Other Taxes Other Taxes Other Tax Adjustment Total Other Taxes Total Plant Related Taxes	PLANT PLANT	737 0 737 83,205	860 0 860 97,129	1,758 0 1,758 198,632	1,668 0 1,668 188,469	2,842 0 2,842 321,053
Revenue Related Taxes Other State Taxes Total Revenue Related Taxes	REVCLAIM	397 397	657	1,138	934 934	1,513 1,513
Total Taxes Other Than Income		110,806	133,522	271,399	249,994	426,186
FEDERAL & STATE INCOME TAXES State Tax @ 6.50%		(1,268)	(6,161)	7,380	50,296	115,405
Federal Tax @ 35.00%		(988'9)	(31,018)	37,156	253,222	581,018
Amortization of ITC		(4,175)	(4,874)	(8,967)	(9,457)	(16,110)
Deferred Tax Flowback		2,945	3,437	7,030	6,670	11,362
Total Income Tax Expense		(8,885)	(38,616)	41,599	300,731	691,676
INTEREST ON CUSTOMER DEPOSITS	TOTCDEP	2,030	5,725	9,298	2,779	391
Total Expenses		5,180,568	5,915,891	15,596,212	996'080'6	8,232,167
Net Operating Income		133,631	80,156	393,417	790,697	1,650,917

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BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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ALLOC DEVIET OPINCOME TAXES-18	FEDERAL & STATE TAX CALCULATION	Operating Revenues	Operating Expenses Operation & Maintenance Expense Depreciation & Amortization Expense Taxes Other Than Income	Interest Expense Interest on Customer Deposits Interest Expense	Book Taxable Income	Adjustments to Taxable Income Deductions PLANT	11 Taxable Basis State Franchise Tax	sss: State Tax @ 6.50%	Federal Taxable Basis	Federal Income Tax @ 35.00%	Federal Income Tax Liability	Amortization of ITC	Deferred Tax Flowback PLANT	Total Income Tax Expense	Net Income After Tax	Effective State Tax Rate Federal Tax Rate - Current 1 - Incremental Tax Rate Incremental Tax Rate Incremental Tax Rate Effective Incremental Federal Rate Factor for Taxable Basis Interest Expense Percentage Purchased Gas Working Capital % Other O&M Working Capital %
TOTAL		499,812,825	424,086,621 35,353,853 10,067,167	72,506 11,317,539	18,915,139	0	18,915,139	1,229,484	17,685,655	6,189,979	6,189,979	(373,740)	263,604	7,309,327	22,923,351	6.50% 35.00% 0.60775 0.39225 0.32725 1.64541 2.85% 11.564% 0.00%
RESIDENTIAL HEATING R-3 & R-4		334,420,307	283,416,094 22,094,108 6,142,343	891 6,732,364	16,034,508	0	16,034,508	1,042,243	14,992,265	5,247,293	5,247,293	(227,620)	160,543	6,222,459	16,544,412	
RESIDENTIAL NON-HEATING R-1 & R-2		11,080,413	12,021,505 2,293,510 544,599	36 510,923	(4,290,161)	0	(4,290,161)	(278,860)	(4,011,300)	(1,403,955)	(1,403,955)	(20,047)	14,139	(1,688,723)	(2,090,515)	
OUTDOOR LIGHTING		2,802	2,570 54 20	0 27	131	0	131	Ø	122	43	43	(1)	<del></del>	Ω.	107	
HIGH WINTER LOW ANNUAL G-40 & T-40		33,436,361	28,414,796 2,539,360 701,195	23,620 746,832	1,010,558	0	1,010,558	65,686	944,872	330,705	330,705	(25,973)	18,319	388,738	1,368,653	
HIGH WINTER MED ANNUAL G-41 & T-41		49,566,200	42,269,138 2,855,594 887,029	21,937 1,078,001	2,454,500	0	2,454,500	159,542	2,294,957	803,235	803,235	(32,771)	23,114	953,120	2,579,381	
HIGH WINTER HIGH ANNUAL G-42 & T-42		24,302,119	19,940,217 1,836,355 600,073	5,800 762,552	1,157,122	0	1,157,122	75,213	1,081,909	378,668	378,668	(22,747)	16,044	447,178	1,472,496	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 129 of 322

10:27 AM

29-Jun-05

AG-22-44 COS.xIs COST OF SERVICE

6/30/2005 11:11 AM

				12 MONTHS ENDED DECEMBER 31, 2004	ECEMBER 31, 2004		
	DEVELOPMENT OF INCOME TAXES-18	ALLOC	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53
	FEDERAL & STATE TAX CALCULATION						
₩	Operating Revenues		5,314,198	5,996,048	15,989,630	9,821,663	9,883,084
264	Operating Expenses Operation & Maintenance Expense Depreciation & Amortization Expense Taxes Other Than Income		4,762,591 314,026 110,806	5,295,696 519,564 133,522	14,355,136 918,780 271,399	7,702,857 774,605 249,994	5,906,021 1,207,894 426,186
5	Interest Expense Interest on Customer Deposits Interest Expense		2,030 144,261	5,725 136,326	9,298	2,779 317,641	391 567,136
7	Book Taxable Income		(19,515)	(94,785)	113,539	773,787	1,775,457
10	Adjustments to Taxable Income Deductions	PLANT	0	0	0	0	0
7	11 Taxable Basis State Franchise Tax		(19,515)	(94,785)	113,539	773,787	1,775,457
12	Less: State Tax @ 6.50%		(1,268)	(6,161)	7,380	50,296	115,405
5	Federal Taxable Basis		(18,247)	(88,624)	106,159	723,491	1,660,052
4	Federal Income Tax @ 35.00%		(6,386)	(31,018)	37,156	253,222	581,018
5	Federal Income Tax Liability		(6,386)	(31,018)	37,156	253,222	581,018
16	Amortization of ITC	PLANT	(4,175)	(4,874)	(6,967)	(9,457)	(16,110)
17	Deferred Tax Flowback	PLANT	2,945	3,437	7,030	6,670	11,362
18	Total Income Tax Expense		(8,885)	(38,616)	41,599	300,731	691,676
19	Net income After Tax		133,631	80,156	393,417	790,697	1,650,917

Effective State Tax Rate
Federal Tax Rate - Current
1 - Incremental Tax Rate
Incremental Tax Rate
Effective Incremental Federal Rate
Effective Incremental Federal Rate
Factor for Taxabie Basis
Interest Expense Percentage
Purchased Gas Working Capital %
Other O&M Working Capital %

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 131 of 322

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

ALOC   COMPANY   RESIDENTIAL   RESIDENTIAL   RESIDENTIAL   HIGH WIN	ITER HIGH WINTER HIGH WINTER LUAL MED ANNUAL HIGH ANNUAL -40 G-41 & T-41 G-42 & T-42	3,190 5,140 27 43 1,210 1,950 9,503 15,312 13,929 22,446	762 1,229 342 551 3,395 5,470 4,499 7,249 18,428 29,695	57, 16, 2, 46, 45,	499 804 314 507 8,291 13,361 9,105 14,671 86,822 139,905
TOTAL	HIGH WINTER LOW ANNUAL G-40 & T-40		-		83 1
TOTAL   HEATING   NON-HEATING   NON-HEATIN	-	۲	40140+	~ 0 0 m ← 0 V	748+8 0
RESIDE TOTAL HEAD HEAD COMPANY R-3 & 344 EXP717 344 EXP719 121,637 178,302 IABPM 9,759 EXP741 4,376 EXP742 43,564 EXP754 23,027 EXP754 23,027 EXP755 20,344 EXP755 20,344 EXP777 994,820 LABLM 6,383 EXP777 994,820 LABLM 6,383 EXP7782 116,542 1111,363	RESIDENTIAL NON-HEATING R-1 & R-2	₩.	<del>-</del>		6 7, 2, 7
TOT ALLOC COMF EXP717 EXP717 EXP719 EXP719 EXP719 EXP719 EXP719 EXP719 EXP719 EXP719 EXP719 EXP75 EXP75 EXP75 EXP75 EXP75 EXP777 1.1		26,488 223 10,048 78,912 115,673	6,331 2,839 28,189 37,359 153,032	294,301 84,416 14,939 13,198 238,533 645,387	<i>r-</i> 0
3888 388 38888 388	TOTAL	40,830 344 15,490 121,637 178,302	9,759 4,376 43,452 57,587 235,888	453,645 130,121 23,027 20,344 367,683 994,820	6,383 4,025 106,134 116,542 1,111,363
DEVELOPMENT OF LABOR ALLOCATIONELOPMENT OF LABOR ALLOCATIONUE PROPANE PROD LABOR  10. Let be supported by the support of the s		LABPO EXP717 EXP719 EXP735	LABPM EXP741 EXP742	LABLO EXP754 EXP757 EXP759 EXP775	LABLM EXP781 EXP782
12847 0 0 0 0 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2	DEVELOPMENT OF LABOR ALLOC-19 DEVELOPMENT OF LABOR ALLOCATC	LIQUEFIED PROPANE PROD LABOR Operation Labor 710-Supervision 717-LPG Gas Expenses 719-Handling Expense 735-Miscellaneous Production Exp Total Operation Labor	Maintenance Labor 740-Supervision 741-Maintenance of Struct & Improv 742-Maintenance of Production Equip Total Maintenance Labor Total Liquefled Propane Prod Labor	20	Ε

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 132 of 322

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	LOW WINTER LRG HI ANNUAL G-53 & T-53			1,056		401	3,146	4,611	25	113	1 124	21,1	1,100	1,0		1	11,732	3,365	596	526	9,509		25,728	4	10	2.745	3.014	28,742	34,843
÷	LOW WINTER HIGH ANNUAL G-52 & T-52			568	S	215	1,692	2,480	136	64	- POP	801	3 204	107'6		6	606,0	1,810	320	283	5,114	0	13,836	88	56	1.476	1621	15,457	18,737
AS COMPANY ERVICE STUDY SECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51			746	9	283	2,223	3,258	178	- G	707	1050	100,1	4,31		4	8,290	2,378	421	372	6,719	0	18,180	117	74	1.940	2 130	20,310	24,621
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50			222	2	84	661	696	23	20	47	213	100.1	187'1		•	2,464	707	125		1,997	0	5,404	133	22	577	200	850,8	7,319
	HIGH WINTER LRG HI ANNUAL G-43 & T-43			27.1	ß	219	1,718	2,519	138	200	83.42	410	*10	3,332			6,409	1,838	325	287	5,194	0	14,054	Ob	25	1 499	1,100	15,700	19,033
10:27 AM	ALLOC			LABPO	EXP717	EXP719	EXP735		I ABPM	EVD741	147171	14/47 14/47					LABLO	EXP754	EXP757	EXP759	EXP775	EXP777		BARIM	EXP781	EYD782	LAI 104		
29-Jun-05	DEVELOPMENT OF LABOR ALLOC-19	DEVELOPMENT OF LABOR ALLOCATOR	LIQUEFIED PROPANE PROD LABOR	710-Supervision	717-LPG Gas Expenses	719-Handling Expense	735-Miscellaneous Production Exp	Total Operation Labor	Maintenairce Labor 740-Supervision	7.40-Output Marian	740 Millionance of Struct & Improv	/4Z-Maintenance of Production Equip	lotal Maintenance Labor	Total Liquefied Propane Prod Labor	LIQUEFIED NATURAL GAS LABOR	Operation Labor	750-Supervision	754-Liquefaction Expense	757-Vaporization Expense	759-Handling Expense	775-Miscellaneous Production Exp	777-Lease Expense	Total Operation Labor	Maintenance Labor	781-Maintenance of Struct & Improv	782 Maintenance of Droduction Equip	Total Maintenance Leber	Total Liquefied Natural Gas Prod Labor	S Total Production Labor

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 133 of 322

6/30/2005 11:11 AM

10:27 AM 29-Jun-05

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

ESIDENTIAL RESIDENTIAL HIGH WINTER HIGH WI	298.192 26,745 1 36,196 53,668 32,323 0 0 0 0 0	0 0 0	2,511	316,977 373,813	37,527 14 222,885 453,254	18,310 1 25,522 37,974	0 0	21 743,527 1,102,434		196 0 286 392	221 0 1,312 2,668	1,160,305 22,246 9 132,125 268,688 210,245	0 0 0	1 10,828 22,019	137,785 0 98,583 34,026		2,604 1 15,465 31,450	194,237 10 283,994 389,190 2	
RESIDENTIAI TOTAL HEATING COMPANY R-3 & R-4	516,364	0		3.903.793				10,606,968		4,263	21,780	2,193,154	0	179,726	1,261,488	312,751	256,706	4,229,868	
ALLOC	LABDO EXPR51	EXP852	EXP857	EXP8/4 FXP878	EXP879	EXP880	EXP881			LABDM	EXP886	EXP887	EXP888	EXP889	EXP892	EXP893	EXP894		
DEVEL OF LABOR ALLOC CONT-20	Operation Labor 1 850-Operation Supervision & Engineer 2 851-System Control & Load Diseasch	3 852-Communication System Exp		5 874-Mains and Services Exp		8 880-Other Expenses		10 Total Operation Labor	Maintenance Labor	11 885-Supervision	12 886-Maintenance of Struct & Improv	13 887-Maintenance of Mains	14 888-Maint of Compressor Station Equip	15 889-Maint of Meas & Reg Station Equip			18 894-Maintenance of Other Equipment		

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 134 of 322

6/30/2005 11:11 AM

Attachment AG-22-44

29-Jun-05	10:27 AM		BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	AS COMPANY ERVICE STUDY DECEMBER 31, 2004			
DEVEL OF LABOR ALLOC CONT-20	ALLOC	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53	
TRANSMISSION & DISTRIB LABOR							
Oneration Labor							
850-Operation Supervision & Engineer	LABDO	5,820	8,305	18,068	14,200	22,845	
851-System Control & Load Dispatch	EXP851	a	0	0	0	0	
852-Communication System Exp	EXP852	0	0	0	0	0	
857-Measuring & Regulating Stat Exp	EXP857	4,971	2,107	8,487	9,880	19,643	
874-Mains and Services Exp	EXP874	22,341	21,567	44,967	49,676	88,583	
878-Meter & House Regulator Exp	EXP878	7,805	101,451	160,170	59,954	27,657	
879-Customer installations Exp	EXP879	74,313	31,498	126,870	147,683	293,621	
880-Other Expenses	EXP880	4,309	2,667	12,578	10,293	16,934	
881-Rents	EXP881	Ф	0	0	0	0	
Total Operation Labor		119,560	170,594	371,140	291,686	469,283	
Maintenance Labor							
885-Supervision	LABDM	55	51	118	122	219	
886-Maintenance of Struct & Improv	EXP886	437	185	747	869	1,729	
887-Maintenance of Mains	EXP887	44,053	18,672	75,208	87,546	174,058	
888-Maint of Compressor Station Equip	EXP888	0	0	0	0	0	
889-Maint of Meas & Reg Station Equip	EXP889	3,610	1,530	6,163	7,174	14,264	
892-Maintenance of Services	EXP892	1,121	19,665	12,741	10,600	4,924	
893-Maint of Meters and House Regul	EXP893	625	8,128	12,832	4,803	2,216	
894-Maintenance of Other Equipment	EXP894	5,156	2,186	8,803	10,247	20,373	
Total Maintenance Labor		55,058	50,416	116,611	121,363	217,782	
Total Transmission and Distribution Labor		174,618	221,010	487,751	413,049	687,066	

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 135 of 322

29-Jun-05 10:27 AM	TOTAL ALLOC COMPANY DEVEL OF LABOR ALLOC CON'T-21	CUSTOMER ACCOUNTS LABOR  901-Supervision 902-Meter Reading Expenses 903-Cust Records & Collection Exp 903-Cust Records & Collection Exp 103-Cust Records & Collection Exp 903-Cust Records & Collection Exp 903-Cust Records & Collection Exp 903-Cust Records & Second Exp 903-Cust Records & Second Exp 903-Cust Record & Second Exp 903-Cust	SALES EXPENSES LABOR  911-Supervision 912-Demonstrating & Selling Exp 913-Advertising Exp 916-Miscellaneous Sales Exp Total Sales Expenses Labor
	RESIDENTIAL HEATING NY R-3 & R-4	221,538 161,416 647,138 502,943 4,970,313 3,590,011 5,838,988 4,254,370	80,141 51,368 117,959 75,897 0 0 7,065 4,240 205,166 131,506
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	RESIDENTIAL NON-HEATING R-1 & R-2	21.953 75,485 481,181 578,619	5,156 7,729 0 315 13,199
S COMPANY FRVICE STUDY ECEMBER 31, 2004	OUTDOOR LIGHTING	00 n n	0000
	HIGH WINTER LOW ANNUAL G-40 & T-40	16.617 38.833 382.529 437,979	4,424 6,499 0 0 403 11,326
A	HIGH WINTER MED ANNUAL G-41 & T-41	7,832 10,753 187,843 206,428	5,167 7,456 0 605 13,228
Attachment AG-22-44	HIGH WINTER HIGH ANNUAL G-42 & T-42	3,465 2,829 85,033 91,327	3,758 5,405 0 458 9,620

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29-Jun-05	05 10:27 AM		BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	BAY STATE GAS COMPANY AS COST OF SERVICE STUDY VTHS ENDED DECEMBER 31, 2007	₩.		
DEVEL OF LABOR ALLOC CONT-21	ALLOC	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53	
USTOMER ACCOUNTS LABOR 901-Supervision 902-Meter Reading Expenses 903-Cust Records & Collection Exp Total Customer Accounts Labor	LABCA EXP902 EXP903	565 349 13,985 14,900	3,288 8,127 75,258 86,673	2,695 4,888 63,445 71,028	1,464 1,511 35,612 38,587	2,241 1,419 55,415 59,075	
ALES EXPENSES LABOR 911-Supervision 912-Demonstrating & Selling Exp 913-Advertising Exp 916-Miscellaneous Sales Exp Total Sales Expenses Labor	LABSA EXP912 EXP913 EXP916	789 1,135 0 96 2,020	894 1,322 0 72 2,288	2,001 2,922 0 201 5,124	2,130 3,101 0 222 5,453	4,454 6,494 0 454 11,402	

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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 137 of 322

DEVEL OF LABOR ALLOC CONT-22	ALLOC	TOTAL COMPANY	RESIDENTIAL HEATING R-3 & R-4	RESIDENTIAL NON-HEATING R-1 & R-2	OUTDOOR LIGHTING	HIGH WINTER LOW ANNUAL G-40 & T-40	HIGH WINTER MED ANNUAL G-41 & T-41	HIGH WINTER HIGH ANNUAL G-42 & T-42
ADMINISTRATIVE & GENERAL LABOR Operation Labor				3 6	¢			Ç
920-Administrative & General Salaries 021-Office Supplies & Expenses	EXP920 EXP921	1,036,667	658,911 3,615	67,396	N C	/3,877 405	81,150	50,405
922-Administrative Exp Transferred-Cr	EXP922	0	0	0	0	0	0	0
923-Outside Services Employed	EXP923	240	155	15	0	16	18	<del></del>
924-Property Insurance	EXP924	0	0	0	0	0	0	0
925-Injuries & Damages	EXP925	23,854	15,162	1,551	0	1,700	1,867	1,160
926-Employees Pensions & Benefits	EXP926	13,376	8,301	783	0	943	1,146	717
928-Regulatory Commission Expenses	EXP928	0	0	0	0	0	0	0
929-Duplicate Charges-Cr	EXP929	0	0	0	0	0	0	0
930-Miscellaneous General Exp	EXP930	112,650	71,601	7,324	0	8,028	8,818	5,477
931 Rents	EXP931	0	0	0	0	0	0	0
Total Operation Labor		1,192,473	757,745	77,438	2	84,970	93,445	58,047
Maintenance Labor		3	000	7	*	6	000	700.00
932 Maintenance of General Plant	EXP932	297,628	182,326	17,420	- 1	21,140	50,003	16,004
Total Administrative & General Labor		1,490,102	940,071	94,858	m	106,110	120,249	74,051
Total Gas Operation & Maintenance Labor		23,718,343	14,836,933	1,439,093	39	1,688,185	2,001,129	1,213,606
CONSTRUCION LABOR CAPITILIZED Distribution Related								
Distribution/Transmission	DISTR	3,541,199	1,873,499	35,920	14	213,338	433,839	339,474
Metscan	PLT397M	8,430	5,139	791	0	684	807	237
i	PLT397E	794,442	484,276	74,584	0	64,506	76,073	22,343
Conversion Burners	CUST3863	12,391	6,555	126	0	746	1,518	1,188
Total Capitilized Labor		4,356,461	2,369,470	111,421	14	279,275	512,237	363,242
Sum of Allocated Labor Expense		28,074,804	17,206,402	1,550,515	53	1,967,460	2,513,367	1,576,848

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

29-Jun-05 10:27 AM

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 138 of 322

6/30/2005 11:11 AM

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS FUDED DECEMBER 31, 2004	
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Attachment AG-22-44

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LOW WINTER LRG HI ANNUAL G-53 & T-53	34,211 188	0 8	0 787	506	0 0 240	0 0	39,417	11,143 50,560	842,946	281,044 60 5,628 983 287,715	1,130,661
Low Winter High annual G-52 & T-52	21,127	0 0	0 486	301	0 000	0 0	24,331	6,801	506,957	141,357 129 12,201 495 154,182	661,139
LOW WINTER MED ANNUAL G-51 & T-51	25,744	O 9	0 592	359	0 0	0	29,639	8,621 38,260	626,784	121,435 346 32,595 425 154,802	781,586
LOW WINTER LOW ANNUAL G-50 & T-50	14,862 82	0 6	342	188	0 1	C10'1	17,091	4,441 21,532	338,823	30,148 219 20,646 105 51,119	389,941
HIGH WINTER LRG HI ANNUAL G-43 & T-43	8,982	\$ 0 0	0 207	133	0 0	9/6	10,348	2,929 13,277	223,848	71,130 17 1,588 249 72,984	296,832
ALLOC	EXP920	EXP922 EXP923	EXP924	EXP926 EXP928	EXP929	EXP930 EXP931		EXP932		DISTR PLT397M PLT397E CUST3863	
DEVEL OF LABOR ALLOC CONT-22	ADMINISTRATIVE & GENERAL LABOR Operation Labor 920-Administrative & General Salaries	92.1-Onice Supplies & Expenses 922-Administrative Exp Transferred-Cr 923-Outside Services Employed	924-Property Insurance 925-Injuries & Damages	926-Employees Pensions & Benefits	929-Duplicate Charges-Cr	930-Miscellaneous General Exp 931 Rents	Total Operation Labor	Maintenance Labor 932 Maintenance of General Plant Total Administrative & General Labor	Total Gas Operation & Maintenance Labor	CONSTRUCION LABOR CAPITILIZED Distribution Related Distribution/Transmission Metscan ERT Conversion Burners Total Capitilized Labor	21 Sum of Allocated Labor Expense
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Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 139 of 322

HIGH WINTER HIGH ANNUAL G-42 & T-42	26,756,200 1,472,496 5.50% 0.953 22,321,850 17,483,688 \$1,2767	9.05% 2,421,436 23,883,250 1,561,399 6,399% 17,483,688 \$1,3660 \$0.0893	23,883,250 1,561,399 6,99% 9,05% 2,421,436 17,483,688 51,660 \$0,0893
HIGH WINTER H MED ANNUAL H G-41 & T-41	37,824,612 2,579,381 6.82% 1.181 46,870,369 38,636,479 \$1,2131	9.05% 3,423,127 48,258,681 1,388,312 2.96% 38,636,479 \$1.2490 \$0.0359	48,258,681 1,388,312 2.96% 3,05% 3,423,127 38,636,479 \$1,2490 \$0.0359
HIGH WINTER F LOW ANNUAL B G-40 & T-40	26,204,647 1,368,653 5,22% 0,905 31,946,429 23,311,210 \$1,3704	9.05% 2.371,521 33,586,561 1.650,132 5.17% 23,311,210 \$1,4412 \$0.0708	33.596.561 1,650,132 5.17% 9.05% 2,371,521 23,311,210 \$1,4412 \$0.0708
OUTDOOR LIGHTING	950 107 11.24% 1.947 2,726 2,728 \$0.9992	9.05% 86 2.692 (34) -1.25% 2.728 \$0.9867 -\$0.0125	2,692 (34) -1,25% 9.05% 8.6 2,728 \$0.9867 -\$0.0125
RESIDENTIAL NON-HEATING R-1 & R-2	17,927,107 (2,090,515) -11.66% -2.020 10,830,018 6,394,258 \$1.6937	9.05% 1,622,403 16,939,304 6,109,286 56,41% 6,394,258 \$2,6491 \$0.9554	16,939,304 6,109,286 56.41% 9.05% 1,622,403 6,394,258 \$2.6491 \$0.9554
RESIDENTIAL HEATING R-3 & R-4	236,223,289 16,544,412 7.00% 1.213 323,429,755 247,703,740 \$1.3057	9.05% 21,378,208 331,383,347 7,953,592 247,703,740 \$1,3378 \$0.0321	331,383,347 7,953,592 2.46% 9.05% 21,378,208 247,703,740 \$1,3378 \$0,0321
TOTAL COMPANY	397,106,628 22,923,351 5,77% 1,000 478,651,282 365,949,048 \$1,3080	9.05% 35,938,150 500,066,007 21,414,725 4,47% 365,949,048 \$1,3665 \$0,0585	500.066,007 21,414,725 4,47% 9.05% 35,938,150 365,949,048 \$1,3665 \$0.0885
ALLOC			
REVENUE REQUIREMENTS-23 PRESENT RATES	Rate Base  Net Operating Income (Present Rates) Rate of Return (Present Rates) Relative Rate of Return Sales Revenues (Present Rates) Annual Booked Therm Sales Sale Revenue \$/Therm (Present Rates)	CLAIMED RATE OF RETURN  8 Claimed Rate of Return 9 Return Req for Claimed Rate of Return 10 Sales Revenue Required Claimed ROR 11 Revenue Deficiency Sales Revenues 12 Percent Increase Required 13 Annual Booked Therm Sales 14 Sales Revenue Required \$/Therm 15 Revenue Deficiency \$/Therm	16 Proposed Sales Revenues 17 Revenue Deficiency Sales Revenues 18 Percent Increase Proposed 19 Proposed Rate of Return 20 Return Required for Proposed Revenue 21 Annual Booked Therm Sales 22 Sales Revenue Required \$/Therm 23 Revenue Deficiency \$/Therm

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

10:27 AM

29-Jun-05

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 140 of 322

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	LOW WINTER LRG HI ANNUAL G-53 & T-53	19.899,502 1,650,917 8.30% 1.437 8,317,714 3,153,997 \$2.6372	9.05% 1,800,905 8,564,507 2,6778 3,153,97 \$2,7154 \$0.0782	8,564,507 246,793 2.97% 9.05% 1,800,905 3,153,997 \$2,7154 \$0.0782
	LOW WINTER HIGH ANNUAL G-52 & T-52	11,145,300 790,697 7,09% 7,109% 9,011,447 6,665,891 \$1,3519	9.05% 1,008.650 9.370,069 358.622 3.98% 6,665.891 \$1.4057 \$0.0538	9,370,069 358,622 3,98% 9,05% 1,008,650 6,665,891 \$1,4057 \$0,0538
S COMPANY RVICE STUDY ECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51	11,279,886 393,417 3,49% 0,604 15,241,815 13,718,907 \$1,1110	9.05% 1,020,830 16,274,168 1,032,353 6,77% 13,718,907 \$1,1863	16,274,168 1,032,353 6,77% 9,05% 1,020,830 13,718,907 \$1,1863 \$0,0753
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50	4,783,357 80,156 1.68% 0.290 5,775,878 4,446,204 \$1.2991	9.05% 432.894 6.356,277 580.399 10.05% 4.446,204 \$1.4296 \$0.1305	6,356,277 580,399 10.05% 9.05% 432,894 4,446,204 \$1,4296 \$0,1305
	HIGH WINTER LRG HI ANNUAL G-43 & T-43	5,061,778 133,631 2,64% 0,457 4,903,279 4,431,946 \$1,1063	9.05% 458.091 5.437,151 533.871 10.89% 4,431,946 \$1.2268 \$0.1205	5,437,151 533,871 10.89% 9.05% 458,091 4,431,946 \$1,2268 \$0.1205
10:27 AM	ALLOC			
29-Jun-05	REVENUE REQUIREMENTS-23 PRESENT RATES	Rate Base Net Operating Income (Present Rates) Net Operating Income (Present Rates) Rate of Return (Present Rates) Ralative Rate of Return Sales Revenues (Present Rates) Annual Booked Therm Sales Sale Revenue \$/Therm (Present Rates) CLAIMED RATE OF RETURN	Claimed Rate of Return Return Rey for Claimed Rate of Return Sales Revenue Required Claimed ROR Revenue Deficiency Sales Revenues Percent Increase Required Annual Booked Therm Sales Sales Revenue Required \$/Therm Revenue Deficiency \$/Therm	Proposed Sales Revenues Revenue Deficiency Sales Revenues Percent Increase Proposed Proposed Rate of Return Return Required for Proposed Revenue Annual Booked Therm Sales Sales Revenue Required \$/Therm Revenue Deficiency \$/Therm
		- 0 w 4 v o r	8 9 5 1 5 5 4 5	16 18 19 19 22 23 23

Attachment AG-22-44	HIGH WINTER HIGH ANNUAL G-42 & T-42	18,466 18,466 18,466 9,5864%	920 18,466 19,386	205,273 2,289,761		9.5864%	8,533,527	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 141 of 322
¥	HIGH WINTER MED ANNUAL G-41 & T-41	47,004 47,004 47,004 12.2512%	1,609 47,004 48,613	358,374 5,828,405		12.2512%	13,738,676	
	HIGH WINTER LOW ANNUAL G-40 & T-40	31,505 31,505 31,505 31,505 6.0245%	757 31,505 32,262	168,590 3,906,613		6.0245%	12,507,429	
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	OUTDOOR LIGHTING	0 0 0 0 0 0.0004%	-0-	169 0		0.0004%	356	
BAY STATE GA GAS COST OF SE MONTHS ENDED D	RESIDENTIAL NON-HEATING R-1 & R-2	1,878 1,878 1,878 1,0143%	1,344 1,878 3,222	300,841 232,905		1.0143%	11,410,115	
12	RESIDENTIAL HEATING R-3 & R-4	257,370 257,370 257,370 52.9058%	17,260 257,370 274,630	3,862,967		52.9058%	111,553,441	
	TOTAL	369,418 369,418 369,418 100,0000% 28.6%	28,184 369,418 397,602	6,288,068 45,807,643		100.0000%	175,507,389	
10:27 AM	ALLOC			DBASE DREMAIN		DISTR	PENSION	
29-Jun-05	ALLOCATION FACTOR TABLE-24	DEMAND RELATED  PRODUCTION ALLOCATORS  2 Design Day Remaining Demands - Sales 3 LPG Production Allocator - Prod Function 4 LNG Production Allocator - Prod Function 5 LPG & LNG Prod Alloc - Distr Function 6 LPG & LNG Distr Pressure Support %	7 8 Design Day Base Demands - Sales Cust 9 Design Day Remaining Demands - Sales 10 Total Design Day Sendout - Sales Cust	12. 13 GAS COST ALLOCATORS 14 Base Demand Gas Costs 15 Remaining Demand Gas Costs 16	18 DISTRIBUTION ALLOCATORS	1 Distribution Allocator	2 Sension & PBOP Expense Allocator 4	5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 142 of 322

Attachment AG-22-44

29-Jun-05	5 10:27 AM		BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	AS COMPANY ERVICE STUDY DECEMBER 31, 2004			
ALLOCATION FACTOR TABLE-24	ALLOC	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53	
DEMAND RELATED							
PRODUCTION ALLOCATORS Design Day Remaining Demands - Sales LPG Production Allocator - Prod Function LNG Production Allocator - Prod Function LPG & LNG Prod Alloc - Distr Function LPG & LNG Distr Pressure Support %		4,337 4,337 4,337 2.0086%	1,551 1,551 1,551 0,8514%	4,381 4,381 4,381 3,4292%	1,289 1,289 1,289 3,9918%	1,637 1,637 1,637 7,9364%	
8 Design Day Base Demands - Sales Cust 9 Design Day Remaining Demands - Sales 0 Total Design Day Sendout - Sales Cust		554 4,337 4,891	874 1,551 2,425	2,853 4,381 7,234	1,598 1,289 2,887	414 1,637 2,051	
GAS COST ALLOCATORS Base Demand Gas Costs Remaining Demand Gas Costs	DBASE DREMAIN	122,834 537,777	195,298 192,307	638,567 543,192	342,813 159,796	92,342 203,086	
B DISTRIBUTION ALLOCATORS							
1 Distribution Allocator	DISTR	2.0086%	0.8514%	3.4292%	3.9918%	7.9364%	
2 3 Pension & PBOP Expense Allocator 4	PENSION	1,520,567	2,516,064	4,358,376	3,576,860	5,791,979	

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 143 of 322

10:27 AM

29-Jun-05

ALLOCATION FACTOR TABLE CONT-25	ALLOC	TOTAL	RESIDENTIAL HEATING R-3 & R-4	RESIDENTIAL NON-HEATING R-1 & R-2	OUTDOOR LIGHTING	HIGH WINTER LOW ANNUAL G-40 & T-40	HIGH WINTER MED ANNUAL G-41 & T-41	HIGH WINTER HIGH ANNUAL G-42 & T-42
COMMODITY RELATED								
Base Commodity Gas Costs Remaining Commodity Gas Costs	EBASE EREMAIN	80,774,205 191,688,704	49,657,716 134,395,424	3,867,284	2,167	2,158,849	4,619,659 23,713,567	2,632,837 10,221,852
Annual Therm Firm Sales Annual Therm Firm Transportation Total Annual Therm Firm Throughput		365,949,048 127,549,264 493,498,312	247,703,740 79,549 247,783,289	6,394,258 1,908 6,396,166	2,728 0 2,728	23,311,210 1,900,026 25,211,236	38,636,479 15,524,113 54,160,592	17,483,688 26,651,718 44,135,406
Annual Base Therm - Sales Actual Weather Normalization Adj Base -Sales		378,169,527 (12,220,479)	256,470,043 (8,766,303)	6,394,258 0	2,728 0	24.381,470 (1,070.260)	40,254,087 (1,617,608)	18,083,791 (600,103)
Annual Base Therm - Trans Actual Weather Normalization Adj Base -Trans		129,319,171 (1,769,907)	81,962 (2,413)	1,908 0	0	1,982,789 (82,763)	16,124,058 (599,945)	27,584,660 (932,942)
Annual Therm Firm Sales Sendout Annual Therm Firm Trans Sendout Tot Ann Therm Firm Throughput Sendout		369,645,503 128,837,641 498,483,144	250,205,798 80,353 250,286,151	6,458.846 1,927 6,460.773	2,756 0 2,756	23,546,677 1,919,218 25,465,895	39,026,746 15,680,922 54,707,668	17,660,291 26,920,927 44,581,218

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 144 of 322

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BAY STATE GAS COMPANY AS COST OF SERVICE STUDY NTHS ENDED DECEMBER 31,	LOW WINTER MED ANNUAL G-51 & T-51		8,208,799 2,525,235		13,718,907 7,650,476 21,369,383	13,718,907 0	7,650,476 0	13,857,482 7,727,754 21,585,236	
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50		2,506,976 945,632		4,446,204 797,782 5,243,986	4,446.204 0	797,782	4,491,115 805,840 5,296,955	
	HIGH WINTER LRG HI ANNUAL G-43 & T-43		1,577,413 1,678,560		4,431,946 5,036,085 9,468,031	4,598,151 (166,205)	5,187,929 (151,844)	4,476,713 5,086,955 9,563,668	
10:27 AM	ALLOC		EBASE EREMAIN						
29-Jun-05	ALLOCATION FACTOR TABLE CONT-25	COMMODITY RELATED	1 Base Commodity Gas Costs 2 Remaining Commodity Gas Costs 3	4 :0 «	7 Annual Therm Firm Sales 8 Annual Therm Firm Transportation 9 Total Annual Therm Firm Throughput	10 11 Annual Base Therm - Sales Actual 12 Weather Normalization Adj Base -Sales	13 14 Annual Base Therm - Trans Actual 15 Weather Normalization Adj Base -Trans	7 Annual Therm Firm Sales Sendout 8 Annual Therm Firm Trans Sendout 9 Tot Ann Therm Firm Throughput Sendout	20 22 23 25 26 26 27 28 33 33 33 34 33 33 33 34

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

HIGH WINTER HIGH ANNUAL G-42 & T-42	Bay State Gas Company  2,778,56 2,864,87 2,102 2,87,102 3,87,103 3,888,888 8,888,888 8,888,888 8,888,88
HIGH WINTER MED ANNUAL G-41 & T-41	6,169,869 2,385,861 4,328,031 1,303,439 611,185 12,2512% 12,2512% 12,2512% 12,2512% 4,714 4,683 6,3206% 6,3206% 12,2512% 384,625 4,443 4,683 4,684 11,985 24 11,985 55,963 361 233 361
HIGH WINTER LOW ANNUAL G-40 & T-40	17,876,084 2,023,106 3,669,983 1,105,260 747,953 9,0245% 6,0245% 6,0245% 17,023 16,684 16,910 16,684 16,910 16,684 17,09 190,733 189,039 170 9,141 170 9,144 150
OUTDOOR LIGHTING	0 0.0004% 0.0004% 0.0004% 0.0004% 0.0000% 0.0000% 0.0000% 144 143 143 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RESIDENTIAL NON-HEATING R-1 & R-2	24,984,666 2,339,184 4,243,357 1,277,938 1,0143% 1,0143% 1,0143% 1,0143% 1,0143% 3,089 31,413 8,5521% 6,5521% 6,5521% 1,185,903 33,089 31,413 33,089 31,413 33,089 31,413 33,089 31,413 33,089 31,413 33,089 31,413 33,089 31,413 33,089 31,413 33,089 31,413 33,089 31,413 33,089 31,413 33,089 0 0 396,597 47,645 348,828 65
RESIDENTIAL HEATING R.3 & R-4	166.042,757 15.188.303 27.552,090 8,297,644 26,212 26,29058% 52.9058% 52.9058% 52.9058% 52.9058% 52.9058% 52.9058% 220,467 222,208 64.3422% 64.3422% 64.3422% 64.3422% 64.3422% 62.9058% 8,185,467 222,208 219,642 22,208 219,642 22,208 219,642 22,208 219,643 220,467 222,208 219,642 22,208 21,665,888 115 12 0 2,665,888 165 428 12
TOTAL COMPANY	228,746,364 24,915,976 45,198,411 13,612,047 2,065,320 38,807 100,0000% 100,0000% 100,0000% 283,675 281,020 100,0000% 11,44,296 282,127 281,032 282,137 281,032 283,675 3,372,382 283,672 3,372,382 283,672 3,372,382 283,672 3,372,382 283,773 3,372,382 283,773 3,372,382 283,773 3,372,382 283,773 3,372,382 284,737 281,032 284,737 281,032 283,647 3,368,471 484 3,378,471 482 3,3667
ALLOC	CUST380 CUST381 CUST383 CUST383 CUST3860 CUST3860 CUST3860 CUST3862 CUST3862 CUST3863 CUST487 CUST882 CUST882 CUST882 CUST882 CUST882 CUST893 CUST893 CUST893 CUST893 CUST893 CUST893 CUST893
ALLOCATION FACTOR TABLE CONT-26 CUSTOMER RELATED	Acct 380 Gas Services 2 Act 381 Gas Meters 3 Act 382 Meter Installations 4 Act 383 Gas Regulators 5 Customer Deposits 5 Transportation Customers 7 Act 386.0 Gas Water Heaters 8 Act 386.2 Cascade Diamond Boilers 9 Act 386.2 Cascade Diamond Boilers 10 Act 386.2 Cascade Diamond Boilers 9 Act 386.2 Cascade Diamond Boilers 11 Act 387-Return Check Charges 12 Act 382-Revenue Guardian Care & C/S 13 Act 3902 Meter Reading Expense 14 Act 903-Cust Records & Collection Exp 15 Act 903-Cust Records & Selling Exp 16 Act 913-Advertising Expense 17 Act 903-Customer Installations Exp 18 Act 903 Collections Expense 19 Number of Meters 20 Average Number of Bills 21 Average Number of Customers 22 IOTAL ANNUAL BILL COUNTS 23 Sales Bills 24 Bi-Monthly Sales Bills 25 Sales Bills 26 Farm Sales Bills 27 Transportation Bills 28 Bi-Monthly Sales Customers 39 Daily Metered Transportation Bills 30 I IOTAL ANNUAL CUSTOMER COUNTS 31 Bi-Monthly Sales Customers 32 Sales Customers 33 Sales Customers 34 Farm Sales Customers 35 Farm Transportation Customers 36 Farm Transportation Customers 37 Daily Metered Transportation Customers 37 Daily Metered Transportation Customers

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 146 of 322

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	HIGH WINTER LOW WINTER LOW WINTER LOW WINTER LOW WINTER LEG HI ANNUAL LEG G-53 & T-53 G-43 & T-43 G-50 & T-50 G-51 & T-51 G-52 & T-52 G-53 & T-53	203,287 3,565,851 2,310,269 1,922,133 892,892	647,509	1,174,602 1,854,457	353,746 558,492	140,898	4,054 5,806	2.0086% 0.8514% 3.4292% 3.9918% 7.9364%	2,0086% 0.8514% 3,4292% 3.9918% 7.9364%	2.0086% 0.8514% 3.4292% 3.9918% 7.9364%		2.0086% 0.8514% 3.4292% 3.9918% 7.9364%	2.0086% 0.8514% 3.4292% 3.9918% 7.9364%			0.9620% 1.1208% 2.4771% 2.6285% 5.5055%	0.9620% 1.1208% 2.4771% 2.6285% 5.5055%	
10:27 AM	ALLOC	CUST380	CUST381	CUST382	CUST383	CUSTDEP	CUSTTR	CUST3860	CUST3862	CUST3863	CUST487	CUST488	CUST882	CUST902	CUST903	CUST912	CUST913	
29-Jun-05	ALLOCATION FACTOR TABLE CONT-26	Acct 380 Gas Services	Acct 381 Gas Meters	Acct 382 Meter Installations	Acct 383 Gas Requiators	Customer Deposits	Transportation Customers	Acct 386.0 Gas Water Heaters	Acct 386.2 Cascade Diamond Boilers	Acct 386.3 Conversion Burners	Acct 487-Return Check Charges	Acct 488-Rental Rev-W/H & Conv Burn	Acct 882-Revenue Guardian Care & C/S	Acct 902 Meter Reading Expense	Acct 903-Cust Records & Collection Exp	Acct 912-Demonstrating & Selling Exp	Acct 913-Advertising Expense	

802 802	769,760	176,519	320,211	96,435	0	902	7.9364%	7.9364%	7.9364%	93	7.9364%	7.9364%	622	29	5.5055%	5.5055%	7.9364%	56,618	94	29	99	799	0	91	0	0	0	708	795	0	89	0	0	0	706
4 000 133	1,322,133	382,655	694,148	209,051	70,155	1,889	3.9918%	3.9918%	3.9918%	211	3.9918%	3.9918%	663	249	2.6285%	2.6285%	3.9918%	42,482	427	249	248	2,989	0	1,100	0	1,566	6	314	2,979	0	1,090	0	1,566	6	317
2 240 260	2,310,203	1,022,284	1,854,457	558,492	246,296	2,806	3.4292%	3.4292%	3.4292%	295	3.4292%	3.4292%	2,143	1,756	2.4771%	2.4771%	3.4292%	136,388	2,076	1,756	1,746	21,073	0	15,250	0	5,734	0	89	20,955	0	15,149	0	5,719	0	87
0 3 3 3 4 5 6	3,505,605	647,509	1,174,602	353,746	140,898	4,054	0.8514%	0.8514%	0.8514%	382	0.8514%	0.8514%	3,563	3,326	1.1208%	1.1208%	0.8514%	220,619	3,546	3,326	3,300	39,908	0	35,789	58	4,039	0	22	39,595		35,483	58	4,032	0	22
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700 000	702,507	49,813	90,363	27,214	79,450	120	2.00869	2.0086%	2.00869	111	2.00869	2.0086%	153	#	0.9620%	0.9620%	2.00869	14,220		16	15	181	0	61	0	0	0	120	181		61	0		,	130
010100	CUS 1380	CUST381	CUST382	CUST383	CUSTDEP	CUSTTR	CUST3860	CUST3862	CUST3863	CUST487	CUST488	CUST882	CUST902	CUST903	CUST912	CUST913	CUST879	CUST903C																	
	Acct 380 Gas Services	Acct 381 Gas Meters	Acct 382 Meter Installations	Acct 383 Gas Regulators	Customer Deposits	Transportation Customers	Acct 386.0 Gas Water Heaters	Acct 386,2 Cascade Diamond Boilers	Acct 386.3 Conversion Burners	Acct 487-Return Check Charges	Acct 488-Rental Rev-W/H & Conv Burn	Acct 882-Revenue Guardian Care & C/S	Acct 902 Meter Reading Expense	Acct 903-Cust Records & Collection Exp	Acct 912-Demonstrating & Selling Exp	Acct 913-Advertising Expense	Acct 879-Customer Installations Exp	Acct 903 Collections Expense	Number of Meters	Average Number of Bills	Average Number of Customers	TOTAL ANNUAL BILL COUNTS	Bi-Monthly Sales Bills	Sales Bills	Farm Sales Bills	Fransportation Bills	Farm Transportation Bills	Daily Metered Transportation Bills	TOTAL ANNIAL CLISTOMER COLINTS	Ri-Monthly Sales Customers	Sales Customers	Farm Sales Customers	Transportation Customers	Farm Transportation Customers	Desired to the second s

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 147 of 322

6/30/2005 11:11 AIM

HIGH WINTER MED ANNUAL G-41 & T-41	48,258,681 48,258,681 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
HIGH WINTER LOW ANNUAL G-40 & T-40	33,596,561	
OUTDOOR LIGHTING	000000000000000000000000000000000000000	
RESIDENTIAL NON-HEATING R-1 & R-2	16,939,304 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
RESIDENTIAL HEATING R-3 & R-4	331,383,347	
TOTAL	331,383,347 16,939,304 2,692 33,596,561 48,258,681 23,883,250 5,437,151 6,356,561 48,258,681 23,883,250 5,437,151 16,274,168 9,370,069 8,564,507 16,274,168 9,370,069 8,564,507	
ALLOC	C904R3 C904R1 C904R4 C904R40 C904R41 C904R43 C904R50 C904R50 C487R40 C487R42 C487R43 C487R52 C487R52 C487R53 C487R53	
ALLOCATION FACTOR TABLE CONT-27 INTERNALLY DEVELOPED	Residential Heating Rate R-3 & R-4 2 Residential Non-Heating Rate R-1 & R-2 3 Outdoor Lighting 4 High Winter Low Annual Rate G41 & T41 5 High Winter High Annual Rate G42 & T42 7 High Winter Ligh Annual Rate G52 & T52 9 Low Winter Low Annual Rate G52 & T52 10 Low Winter Low Annual Rate G52 & T52 11 Low Winter Low Annual Rate G52 & T52 12 Low Winter Low Annual Rate G52 & T52 14 High Winter Low Annual Rate G40 & T40 15 High Winter Low Annual Rate G40 & T40 16 High Winter Low Annual Rate G42 & T42 17 High Winter Low Annual Rate G52 & T52 2 Low Winter Low Annual Rate G52 & T52 2 Low Winter Low Annual Rate G53 & T53 2 Low Winter Low Annual Rate G52 & T52 2 Low Winter Low Annual Rate G52 & T52 2 Low Winter Large Annual Rate G52 & T52 2 Low Winter Large Annual Rate G52 & T53 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	

23,883,250 0 0 0 0 0 0

23,883,250 0 23,883,250 0 0 0

HIGH WINTER HIGH ANNUAL G-42 & T-42

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

10:27 AM

29-Jun-05

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 148 of 322

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2
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Attachment AG-22-44

									1															
	LOW WINTER LRG HI ANNUAL G-53 & T-53			0	0	0	0	0	0 :	0	0	0	0	8,564,507		C	0	0	O	0	0	0	8,564,507	
	LOW WINTER HIGH ANNUAL G-52 & T-52			0	0	0	0	0	0	0	0	0	9,370,069	0		C	0	0	0	0	0	9,370,069	0	
S COMPANY ERVICE STUDY ECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51			0	0	0	0	0	0	0	0	16,274,168	0	0		0	0	0	0	0	16,274,168	0	0	
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50			0	0	0	0	0	0	0	6,356,277	0	0	0		<u> </u>	0	. 0	· c	6.356.277	0	0	0	
	HIGH WINTER LRG HI ANNUAL G-43 & T-43			0	0	0	0	0	0	5,437,151	0	0	0	0		C	o c	, 0	5 437 451	0	0	0	0	
10:27 AM	ALOC			C904R3	C904R1	C904OL	C904R40	C904R41	C904R42	C904R43	C904R50	C904T51	C904R52	C904R53		C 487D 40	C487R41	C487R42	C487R43	C487R50	C487T51	C487R52	C487R53	
29-Jun-05	ALLOCATION FACTOR TABLE CONT-27	INTERNALLY DEVELOPED	UNCOLLECTIBLE ACCOUNTS	Residential Heating Rate R-3 & R-4	Residential Non-Heating Rate R-1 & R-2	Outdoor Lighting	High Winter Low Annual Rate G40 & T40	High Winter Med Annual Rate G41 & T41	High Winter High Annual Rate G42 & T42	High Wint Large Annual Rate G43 & T43	Low Winter Low Annual Rate G50 & T50	Low Winter Med Annual Rate G51 & T51	Low Winter High Annual Rate G52 & T52	Low Wint Large Annual Rate G53 & T53	LATE PAYMENT CHARGES	Link 18 Control of Con	High Willief Low Allinal hate 540 & 140	High Winter High Appenal Rate GAD & TAD	High Mint Large Annual Pate G43 & T43	Low Winter Low Applied Rate G50 & T50	Low Winter Med Annual Rate G51 & T51	Low Winter High Annual Rate G52 & T52	Low Wint Large Annual Rate G53 & T53	

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 149 of 322

10:27 AM	
29-Jun-05	

Aftachment AG-22-44

TOTAL COMPANY	TUPUT	
	ALLOC	
		ALLOCATION FACTOR TABLE CONT-27

INTERNALLY DEVELOPED		UNCOLLECTIBLE ACCOUNTS
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	TO SECURE AND ADDRESS OF THE PARTY OF THE PA		
۴	Residential Heating Rate R-3 & R-4	C904R3	Page 23 , Line 10, Col 2
C	Residential Non-Heating Rate R-1 & R-2	C904R1	Page 23, Line 10, Col 3
ሮን	Outdoor Lighting	C904OL	Page 23, Line 10, Col 4
4	High Winter Low Annual Rate G40 & T40	C904R40	Page 23 , Line 10, Col 5
гO	High Winter Med Annual Rate G41 & T41	C904R41	Page 23 , Line 10, Col 6
9	High Winter High Annual Rate G42 & T42	C904R42	Page 23 . Line 10, Col 7
۲-	High Wint Large Annual Rate G43 & T43	C904R43	Page 23 , Line 10, Col 8
ဆ	Low Winter Low Annual Rate G50 & T50	C904R50	Page 23, Line 10, Col 9
ත	Low Winter Med Annual Rate G51 & T51	C904T51	Page 23, Line 10, Col 10
5	Low Winter High Annual Rate G52 & T52	C904R52	Page 23 , Line 10, Col 11
<del></del>		C904R53	Page 23 . Line 10, Col 12

## LATE PAYMENT CHARGES

13 LATE PAYMENT CHARGES 14 High Winter Low Annual Rate G40 & T40 C487R40 Page 23 , Line 10, Col 5 G High Winter High Annual Rate G42 & T42 C487R41 Page 23 , Line 10, Col 6 C487R41 Page 23 , Line 10, Col 7 C487R42 Page 23 , Line 10, Col 7 C487R51 Page 23 , Line 10, Col 7 C487R51 Page 23 , Line 10, Col 9 C487R51 Page 23 , Line 10, Col 10 C487R51 Page 23 , Line 10, Col 10 C487R51 Page 23 , Line 10, Col 10 C487R51 Page 23 , Line 10, Col 11 Pag	12				
High Winter Low Annual Rate G40 & T40 High Winter High Annual Rate G42 & T42 High Winter High Annual Rate G42 & T42 Low Winter High Annual Rate G50 & T50 Low Winter Large Annual Rate G51 & T51 Low Winter Large Annual Rate G52 & T52 Low Winter Large Annual Rate G52 & T52 Low Winter Large Annual Rate G52 & T52 Low Winter Large Annual Rate G53 & T53 C487R53 Page 23 , Line 10, C487R55 Page 23 , Line 10, C487R55 Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line 10, C487R55 Low Wint Large Annual Rate G53 & T53 Low Winter High Annual Rate G53 & T53 Low Wi	5	LATE PAYMENT CHARGES			
High Winter Low Annual Rate G40 & T40 C487R40 Page 23 , Line 10, High Winter Med Annual Rate G42 & T42 C487R41 Page 23 , Line 10, High Wint Large Annual Rate G42 & T42 C487R42 Page 23 , Line 10, Low Winter Low Annual Rate G50 & T50 C487R50 Page 23 , Line 10, Low Winter High Annual Rate G52 & T52 C487R52 Page 23 , Line 10, Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line 10, Line 10, Line Rate G53 & T53 C487R53 Page 23 , Line 10, Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line R	14				
High Winter Med Annual Rate G41 & T41 C487R41 Page 23 , Line 10, High Winter High Annual Rate G42 & T42 C487R42 Page 23 , Line 10, Low Winter Low Annual Rate G50 & T50 C487T51 Page 23 , Line 10, Low Winter Med Annual Rate G52 & T52 C487T52 Page 23 , Line 10, Low Winter High Annual Rate G52 & T52 C487R52 Page 23 , Line 10, Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line 10, Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487R53 Page 23 , Line Rate G53 & T53 C487	15	High Winter Low Annual Rate G40 & T40	C487R40	Page 23 , Line 10, Col 5	
High Winter High Annual Rate G42 & T42 C487R42 Page 23 , Line 10, Low Winter Low Annual Rate G50 & T50 C487R51 Page 23 , Line 10, Low Winter High Annual Rate G52 & T52 C4877R52 Page 23 , Line 10, Low Winter High Annual Rate G52 & T53 C4877R53 Page 23 , Line 10, Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line 10, Line Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line 10, Line Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line 10, Line Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line 10, Line Mint Large Annual Rate G53 & T53 C487R53 Page 23	36	High Winter Med Annual Rate G41 & T41	C487R41	Page 23, Line 10, Col 6	
High Wint Large Annual Rate G43 & T43 C487R43 Page 23, Line 10, Low Winter Low Annual Rate G50 & T50 C487R50 Page 23, Line 10, Low Winter High Annual Rate G51 & T51 C487T51 Page 23, Line 10, Low Wint Large Annual Rate G53 & T53 C487R53 Page 23, Line 10, Line 10, Line 10, Line 10, L	17	High Winter High Annual Rate G42 & T42	C487R42	Page 23 , Line 10, Col 7	
Low Winter Low Annual Rate G50 & T50 C487R50 Page 23 , Line 10, Low Winter Med Annual Rate G51 & T51 C487T51 Page 23 , Line 10, Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line 10, Line Mage 24 Page 24 P	\$	High Wint Large Annual Rate G43 & T43	C487R43	Page 23, Line 10, Col 8	
Low Winter Med Annual Rate G51 & T51	ō	Low Winter Low Annual Rate G50 & T50	C487R50	Page 23 , Line 10, Col 9	
Low Wint Large Annual Rate G52 & T52 C487R52 Page 23 . Line 10. Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line 10.	20	Low Winter Med Annual Rate G51 & T51	C487T51	Page 23, Line 10, Col 10	
Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line 10,	21	Low Winter High Annual Rate G52 & T52	C487R52	Page 23 . Line 10, Col 11	
2.5 2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3	22	Low Wint Large Annual Rate G53 & T53	C487R53	Page 23, Line 10, Col 12	
24 26 27 28 29 30 31 32	23				
25 27 28 29 30 31 33	24				
26 28 29 30 31 32 33	25				
27 29 30 31 31 33	26				
28 29 31 32 33	27				
29 30 31 32 33	28				
30 31 32 33	23				
31 32 33	30				
32 33	33				
33	32				
	33				

Attachment AG-22-44	HIGH WINTER HIGH ANNUAL G-42 & T-42	45.924, 428, 1, 576, 848, 1, 946, 1, 941, 865, 1, 946,
∢ .	HIGH WINTER MED ANNUAL G-41 & T-41	66, 161, 719 2,513,367 60,431 3,095,174 298,219 3,685,130 1,942,183 1,942,183 2,58,30 37,952,606 40,094 1,513,655 6,169,869 2,385,661 4,328,031 1,721,708 69,801 69,801 1,022,395 1,1721,708 69,801 1,022,395 1,1721,708 69,801 2,025 6,165 6,165 6,165 6,167 1,33,439 1,721,708 69,801 2,166 69,801 2,521 2,521 2,521 2,521 2,521 2,521 2,521 2,521 2,521 2,521 2,521 2,521 2,521 2,538 3,385 3,385 3,385 3,385 3,385 3,385 3,385 3,385 3,385 3,385 3,385 3,386
	HIGH WINTER LOW ANNUAL G-40 & T-40	52,436,776 1,967,460 47,894 2,422,899 185,067 339,003 64,001 1,205,269 4,762 127,032 18,662,957 17,876,084 2,023,106 3,689 34,324 472,025 11,846 800,330 11,657 129,502 28,482 518,608 1,767 10,740 3,736 11,664 3,736 11,664 3,736 11,665 11,664 3,736 11,665 11,665 11,665 11,665 11,665 11,665 11,665 11,665 11,665 11,665 11,655 11,655 11,655 11,655 11,655 11,655 11,655 11,655 11,655 11,655 11,655 11,655 11,655 11,655 11,655 11,655
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	OUTDOOR	153, 150,
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY MONTHS ENDED DECEMBER 31,	RESIDENTIAL NON-HEATING R-1 & R-2	40,473,034 1,550,515 36,967 1,909,436 15,471 28,320 100,757 100,757 125,323 24,384,666 2,339,184 42,239,184 42,239,184 42,239,184 42,239,184 42,549 5,779 5,779 5,779 5,779 5,779 5,779 5,779 6,00,723 1,393 1,393 1,393 1,393 1,393 1,393 1,083 1,0
12	RESIDENTIAL HEATING R-3 & R-4	459,546,304 17,206,402 419,738 21,189,433 1,536,851 2,815,485 10,008,921 41,823 1,115,578 163,895,149 173,142 6,536,592 166,042,757 115,88,301 27,552,090 8,297,644 7,435,052 301,432 4,476,346 6,999,276 1,448,592 301,432 4,476,346 1,448,592 301,432 4,476,346 1,448,592 301,432 1,132,559 249,088 4,535,484 15,457 89,184 309,276 11,32,559 249,088 4,535,484 15,499 31,028 7,800 69,693 361,028 1138,379 31,028 1107,617
	TOTAL	754,551,098 28,074,804 689,189 34,573,711 2,868,951 4,393,445 819,245 15,428,067 79,051 2,108,612 309,786,822 327,265 12,365,156 228,746,364 224,915,974 45,198,411 13,612,047 14,053,382 7,303,824 11,420,359 2,363,594 20,028 213,302 47,828 11,023 107,427 591,175 561,177
5 10:27 AM	ALLOC	PLANT LABOR PLT301 PLT303 PLT311 PLT320 PLT320 PLT320 PLT326 PLT386 PLT386 PLT386 PLT386 PLT386 PLT386 PLT386 PLT386 PLT387 PLT387 PLT387 PLT387 PLT389 PLT389 PLT399 PLT396 PLT399 PLT396 PLT399 PLT396 PLT396 PLT397 PLT396 PLT396 PLT396 PLT396 PLT397 PLT396 PLT3
29-Jun-05	INTERNALLY DEVELOPED-28	Total Gas Plant In Service  2 Sum of Allocated Labor Expense 3 Acct 301 Organization 4 Acct 303 Misc. Intangible Plant 5 Acct 302 Other Equipment 7 Acct 320 Other Equipment 8 Acct 321 L.N.G. Equipment 9 Acct 320 Other Equipment 10 Acct 366 Structures & Improvements 11 Acct 367 Gas Mains 12 Acct 369 Meas. & Reg. Station Equipment 13 Acct 369 Meas. & Reg. Station Equipment 14 Acct 369 Gas Services 15 Acct 380 Gas Services 16 Acct 380 Gas Services 17 Acct 380 Gas Services 18 Acct 380 Gas Services 19 Acct 380 Compressor Station Equipment 22 Acct 390 Structures & Improvements 23 Acct 390 Other Equipment 24 Acct 390 Structures & Improvements 25 Acct 390 Structures & Improvement 26 Acct 390 Structures & Improvement 27 Acct 390 Structures & Improvement 28 Acct 391 Office Equipment 29 Acct 390 Structures & Improvement 29 Acct 395 Power Operated Equipment 20 Acct 396 Power Operated Equipment 20 Acct 396 Power Operated Equipment 21 LPG Gas Prod Labor Accts 771 to 735 24 Acct 713-Handiing Expenses 25 Acct 713-Handiing Expense 26 Acct 75-Vaporization Expense

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 151 of 322

6/30/2005 11:11 AM

BAY STATE GAS COMPANY GAS COST OF SERVICE STUD 12 MONTHS ENDED DECEMBER 31
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29-Jun-05 10:27 AM

HIGH WINTER  LOW LOW  LOW LOW  LOW LOW  LOW LOW  LOW LOW  LOW
ALLOC  PLANT  LABOR PLT301 PLT303 PLT303 PLT320 PLT320 PLT320 PLT320 PLT386 PLT387 PLT386 PLT387 PLT386 PLT387 PLT386 PLT387 PLT386 PLT387 PLT

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 152 of 322

Attachment AG-22-44

	INTERNALLY DEVELOPED-28	ALLOC	TOTAL COMPAN INPUT
τ.	Total Gas Plant In Service	PI ANT	Page 4 Tine 18
- ~	Sum of Allocated Labor Expense	I ABOR	3
i cr	Acct 301 Organization	Pt T301	2
4	Acct 303 Misc. Intangible Plant	PLT303	N
S	Acct 305 Structures & Improvements	PLT305	Q,
9	311	PLT311	7
7	Acct 320 Other Equipment	PLT320	Page 2, Line 18
∞	Acct 321 L.N.G. Equipment	PLT321	Page 2, Line 19
Φ	Acct 365 Right of Way	PLT365	Page 3, Line 2
10	Acct 366 Structures & Improvements	PLT366	Page 3, Line 3
<del></del>		PLT367	Page 3, Line 11
12	Acct 368 Compressor Station Equipment	PLT368	Page 3 , Line 12
Ü	Acct 369 Meas. & Reg. Station Equip	PLT369	Page 3, Line 13
7	Acct 380 Gas Services	PLT380	Page 3, Line 14
15	Acct 381 Gas Meters	PLT381	Page 3, Line 15
16	Acct 382 Meter Installations	PLT382	Page 3, Line 16
17	Acct 383 Gas Regulators	PLT383	Page 3, Line 17
18	Acct 386 Gas Water Heaters	PLT3860	3, Line
19	Acct 386 Cascade Diamond Boilers	PLT3862	Page 3, Line 19
20	386	PLT3863	3, Line
21	Acct 387 Other Equipment	PLT387	3, Line
22	Acct 379 Other Equipment	PLT379	ش
23	Acct 390 Structures & Improvements	PLT390	4. Line
24		PLT391	4
25	Acct 392 Transportation Equipment	PLT392	4
56	Acct 393 Stores Equipment	PLT393	4
27	Acct 394 Tools, Shop & Garage Equip	PLT394	4
28	Acct 396 Power Operated Equipment	PLT396	4, Line 10
53	Acct 397 Communication Equip-Other	PLT397O	Page 4 . Line 11 &
30	Acct 398 Miscellaneous Equipment	PLT398	4
31	LPG Gas Prod Labor Accts 717 to 735	LABPO	Pg 19, Ln 2 to 4
32	Acct 717-LPG Gas Expenses	EXP717	
33	Acct 719-Handling Expense	EXP719	Page 9 , Line 3
34	Acct 735-Miscellaneous Production Exp	EXP735	Page 9 , Line 6
35	LPG Gas Prod Labor Accts 741 to 742	LABPM	Pg 19, Ln 9 to 10
36	Acct 741-Maintenance of Struct & Improv	EXP741	Page 9, Line 9
37	Acct 742-Maintenance of Production Eq	EXP742	Page 9, Line 10
38	LNG Gas Prod Labor Accts 754 to 777	LABLO	Pg 19, Ln 14 to 18
39	Acct 754-Liquefaction Expense	EXP754	Page 9, Line 14
40	Acct 757-Vaporization Expense	EXP757	Page 9 , Line 15

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

HIGH WINTER HIGH ANNUAL G-42 & T-42	Bay State Gas Company 1,660 1,660 1,660 1,660 1,660 1,660 1,67,712 1,680 1,680 1,77,74 1,77 1,77 1,77 1,77 1,77 1,77 1
HIGH WINTER MED ANNUAL G-41 & T-41	3,311 81,167 115,123 13,032 3,1032 3,1032 2,941,746 1,048,766 1,048,766 1,048,766 1,024 7,25,715 60,024 7,25,715 60,024 1,560
HIGH WINTER LOW ANNUAL G-40 & T-40	2,055 50,370 71,442 8,606 8,606 8,606 20,499 2,470,793 1,825,572 707,331 0,825,420 457,429 457,429 356,866 40,341 3,710 283,708 2,4316 41,7361 41,7361 41,7361 11,628 6,902 8,736 6,902 8,736 11,628 11,628 11,638 124,409 278,602 (271,811) 1,696,366 1,043,380 49,240
OUTDOOR LIGHTING	0 0 0 0 9 9 9 0 0 0 8 0 8 1 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RESIDENTIAL NON-HEATING R-1 & R-2	4,211 5,972 7,19 1,946,403 1,744 1,1459 1,458 4,113 196,617 528,895 60,086 60,086 625,835 60,086 625,835 60,086 28,440 38,440 4,094 4,094 5,485 113,494 5,56,172 8,044 10,460 5,485 113,494 113,494 5,56,172 8,044 113,494 1,565,020 1,565,020 1,565,020 1,565,020 1,565,020 1,565,020 1,565,020 1,565,020 1,565,020 1,565,020 1,565,020 1,565,020 1,565,020 1,565,020 1,565,020 1,565,020
RESIDENTIAL HEATING R-3 & R-4	17,065 418,289 593,279 7,175 170,229 21,609,171 15,160,108 5,827,173 0 76,122 214,625 2,306,379 3,434,111 3,133,941 335,577 2,509,064 21,705 2,004,967 2,004,967 1,124,728 265,974 213,542 4,092,955 5,417,854 80,137 102,717 112,122 4,494,847 (2,424,278) 1,109,602 2,484,847 (2,424,278) 15,992,874 1,109,602 1,109,602 1,109,602 1,109,603 1
TOTAL	26,304 644,763 914,499 110,159 110,160 26,396 35,262,900 23,368,270 10,090,604 40,090,604 40,225,605 4,388 4,388 4,388 4,403,575 6,90,943
ALLOC	EXP759 EXP775 LABLM EXP777 LABLM EXP781 EXP781 EXP782 INTPLT PRODPLT LABDO EXP854 EXP854 EXP878 EXP878 EXP878 EXP878 EXP878 EXP878 EXP878 EXP878 EXP888 EXP888 EXP889 EXP889 EXP889 EXP889 EXP889 EXP899 EXP891 LABCA EXP992 EXP9913 EXP9913 EXP9913 EXP992
INTERNALLY DEVELOPED CONT-29	Acct 759-Handling Expense Acct 777-Lease Expense LING Gas Prod Labor Accts 781 to 782 Acct 777-Lease Expense LING Gas Prod Labor Accts 781 to 782 Acct 781-Maintenance of Struct & Improv Acct 782-Maintenance of Struct & Improv Acct 782-Maintenance of Production Eq 7 Total Intangible Plant Total Intangible Plant Total Production Plant Total Production Plant Total Sp. Accustor Regulator Exp Acct 887-Measuring & Regul Stat Exp Acct 877-Measuring & Regul Stat Exp Acct 877-Measuring & Regul Stat Exp Acct 877-Measuring & Regul Stat Exp Acct 877-Customer Installations Exp Acct 878-Outer Expenses Acct 887-Maintenance of Struct & Improv Acct 886-Maintenance of Services State Acct 888-Maint of Meas & Reg Station Eq Acct 889-Maintenance of Services Acct 887-Maintenance of Services Acct 887-Maintenance of Services Acct 887-Maintenance of Services Acct 887-Maintenance of Services Acct 888-Maintenance of Services Acct 889-Maintenance of Compressor Station Eq Acct 889-Maintenance of Services Acct 892-Maintenance of Other Equip Customer Accts Labor Accts 902 to 903 Acct 992-Meter Reading Expenses Acct 903-Cust Records & Collection Exp Sales Expenses Labor Accts 912 to 916 Acct 920-Administrative Exp Transf-Cr 86 Acct 921-Office Supplies & Expenses Acct 922-Administrative Exp Transf-Cr 86 Acct 928-Injuries & Damages Acct 926-Injuries & Damages Acct 928-Employees Pensions & Benef

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 154 of 322

INTERNALLY DEVELOPED CONT-29	ALLOC	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53
Acct 759-Handling Expense EX	XP759	372	143	481	366	089
duction Exp	EXP775	9,109	3,503	11,783	8,967	16,675
Acct 777-Lease Expense EX	XP777	12,919	4,968	16,712	12,719	23,651
ts 781 to 782	4BLM	1,556	598	2,013	1,532	2,849
6	XP781	156	09	202	154	286
	XP782	3,707	1,425	4,795	3,649	982'9
	ITPLT	373,243	489,194	980,890	831,622	1,422,099
	RODPLT	330,127	126,951	427,056	325,003	604,352
r Accts 851 to 881	ABDO	113,739	162,290	353,072	277,486	446,438
	XP851	0	0 :	0	0	0
	XP852	2,890	1,225	4,934	5,743	11,419
	XP857	8,145	3,452	13,905	16,186	32,181
	XP874	44,919	43,363	90,410	99,879	178,106
r Exp	XP878	11,263	146,403	231,141	86,519	39,911
	8787X	118,985	50,432	203,134	236,459	470,123
	XP880	6,811	8,958	19,882	16,270	26,767
	XP881	1,237	524	2,112	2,458	4,887
Trans & Distr Maint Lab Accts 851 to 881 LA	LABDM	55,003	50,365	116,494	121,240	217,563
	EXP886	824	349	1,407	1,638	3,256
Acct 887-Maintenance of Mains EX	EXP887	76,122	32,264	129,957	151,277	300,765
	EXP888	0	0	0	0	
	XP889	4,613	1,955	7,875	9,167	18,225
Acct 892-Maintenance of Services EX	XP892	1,499	26,302	17,041	14,178	6,586
Acct 893-Mnt of Meters and House Regul EX	XP893	872	11,339	17,902	6,701	3,091
	EXP894	8,107	3,436	13,841	16,112	32,033
Customer Accts Labor Accts 902 to 903	ABCA	14,334	83,385	68,333	37,123	56,834
Acct 902-Meter Reading Expenses EX	XP902	375	8,737	5,255	1,625	1,526
ςχ j	xp903	21,106	113,575	95,748	53,744	83,629
Sales Expenses Labor Accts 912 to 916 LA	LABSA	1,231	1,394	3,122	3,323	6,948
Acct 912-Demonstrating & Selling Exp EX	XP912	1,536	1,789	3,954	4,196	8,789
	XP913	3,328	1,858	6,205	7,064	14,219
ales Exp	XP916	96	72	200	222	454
Sal	EXP920	15,125	25,027	43,352	35,578	57,612
	XP921	33,871	56,045	97,083	79,674	129,016
	EXP922	(33,045)	(54,679)	(94,716)	(77,732)	(125,871)
	XP923	218,189	328,866	590,945	480,380	778,494
	XP924	0	0	0	0	0
	XP925	25,155	41,624	72,101	59,172	95,817
s & Benef	XP926	146,921	207,857	397,011	332.683	559,635

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 155 of 322

10:27 AM 29-Jun-05

OC INPUT		Pg 19, Ln 21 to 22 1 Page 9 , Line 24			Pg 20, Ln	Page 11, Line 2		Page 11.	Page 11				Page 11, Line	Page 11,	Page 11.	Page 11,	Page 11 Line	4 Page 11, Line 18 Pr 21 In 2 to 3			Pg 21	Page	Page 12,	Page 13, Line	Page 13,	Page 13, Line	Page 13.	Page 13.	Page 13, Line	b Page 14, Line 4 B Page 14, Line 7	ı
ALLOC	EXP759 EXP775 EXP777	LABLM EXP781	EXP782	PRODPLT	LABDO	EXP852	EXP857	EXP878	EXP879	EXP880	EXP881	LABDM	EXP887	EXP888	EXP889	EXP892	EXP893	EXP894	EXP902	EXP903	LABSA	EXP912	EXP915	EXP920	EXP921	EXP922	EXP923	EXP924	EXP925	EXP926 EXP928	
INTERNALLY DEVELOPED CONT-29		LNG Gas Prod Labor Accts 781 to 782 Acct 781-Maintenance of Struct & Improv	/	•		Acct 851-sys Control & Load Dispatch Acct 852-Communication System Exp	-	Acct 874-Mains and Services Exp Acct 878-Meter & House Regulator Exp		_	_	•	Acct 885-Maintenance of Struct & Imploy Acct 887-Maintenance of Mains		Acct 889-Maint of Meas & Reg Station Eq	-	-	Acct 894-Maintenance of Other Equip	-			_		Acct 920-Administrative & General Sal		Acct 922-Administrative Exp Transf-Cr	_	_	_	Acct 926-Employees Pensions & Benef Acct 928-Regulatory Commission Exp	
	2 2	4 K	9 1	- ∞	တ	2 ==	CI (	3 4	5	9	17	\$	2 5	2 2	22	23	24	25	27	28	29	30	2 %	33	34	35	36	37	33	8 9	

HIGH WINTER HIGH ANNUAL G-42 & T-42	133.504 41.981 14.081 14.081 14.081 14.081 15.21,92 16.2781 17.0861 18.1281 17.0861 18.1281 17.0861 18.1281 17.0861 18.1281 17.0861 18.1281
HIGH WINTER MED ANNUAL G-41 & T-41	0 67,587 320,510 76,203 22,446 7,249 125,234 14,671 1,102,434 3,674 13,738,676 13,738,676 13,738,676 13,738,676 14,187,200 1,640,899 935,120 2,751,410 57,012,993 239,145 50,569 11,013,741 17,901,054 11,013,741 69,7,209 1,013,741 17,901,054 11,013,741 17,901,054 11,013,741 17,901,054 11,013,741 17,901,054 17,001,054 17,901,054 17,701,054 17
HIGH WINTER LOW ANNUAL G-40 & T-40	0 61,530 269,072 60,103 13,929 4,499 77,717 77,717 77,717 77,717 77,717 77,717 77,717 77,717 77,717 77,717 77,717 77,717 77,717 743,527 28,394 43,529 11,02,812 11,02,
OUTDOOR LIGHTING	22 22 356 356 1,363 1,363 1,363 1,00 100 100 100 100 100 100 100 100 10
RESIDENTIAL NON-HEATING R-1 & R-2	0 56,132 280,902 49,525 1,164 1,164 761 549,382 194,237 578,619 11,410,115 11,410,115 11,410,115 11,511 1,511 1,511 22,345,145 7,803 32,845,145 7,803 32,845,145 7,803 32,845,145 7,803 32,845,145 7,803 32,845,145 7,107 1,725 83,393 1,482,119 1,278,837 326,838 303,885 60,503 1,482,119 1,278,837 326,838 303,885 60,503 2,1065 2,398 1,482,119 1,278,837 326,838 303,885 60,503 2,1065 2,1065 2,1065 2,398 1,482,119 1,278,837 326,838 303,885 60,503 2,1065 2,398 1,482,119 1,278,837 326,838 303,885 60,503 2,1065 2,398 1,482,119 1,278,837 326,838 303,885 60,503 326,838 327,838 327,848
RESIDENTIAL HEATING R-3 & R-4	0 548,785 2,145,196 518,384 115,673 37,389 645,387 75,607 6,125,365 2,511,595 4,254,370 131,506 20,756,632 111,553,441 111,553,441 111,553,441 11,553,441 11,680,782 9,165,078 37,964 11,381,733 6,165,078 37,964 11,370,440 37,372,279 392,844 1,370,442 238,176 1,147,481 488,757 14,370,442 238,176 1,147,481 488,757 14,370,442 238,176 1,147,481 488,757 14,836,933 22,391,999
TOTAL COMPANY	0 863,406 3,496,560 846,177 178,302 57,802 116,542 10,006,968 4,229,868 5,838,089 175,507,389 175,507,389 175,507,389 175,507,389 175,507,389 175,507,389 176,507,389 176,077 176,779 126,077 176,779 126,075,826
ALLOC	EXP929 EXP930 EXP931 EXP931 EXP932 TLABPO TLABPO TLABDM TLABPO TOTCDEP PLT36720 PLT367CI PLT367
INTERNALLY DEVELOPED CONT-30	Act 929-Duplicate Charges-Cr Act 930-Miscellaneous General Exp Act 931 Rents Act 931 Rents Total LPG Gas Operating Labor Total LNG Gas Maintenence Labor 7 Total LNG Gas Maintenence Labor 7 Total Transm & Distr Maintenance Labor 10 Total Transm & Distr Maintenance Labor 11 Total Transm & Distr Maintenance Labor 12 Total Transm & Distr Maintenance Labor 13 Total General Plant 14 Claimed Sales Expense Labor 15 Total General Plant 16 Act 380.381.322 & 383 - Meters & Hee Reg 17 Act 380.381.322 & 383 - Meters & Hee Reg 18 Act 380.381.322 & 383 - Meters & Hee Reg 19 Transm & Distr Oper Acts 851 to 879 20 Total Customer Deposits 21 Act 380.381.322 & 383 - Meters & Reg 22 Act 380.381.322 & 383 - Serv.Met & Reg 23 Act 380.4-Uncollectible Accts-Other Rev 24 Act 367-Gas Mains - Bare Steel 25 Act 367-Gas Mains - Coated Steel 36 Act 367-Gas Mains - Cattodic Protect 29 Act 367-Gas Mains - Cattodic Protect 29 Act 367-Gas Mains - Cattodic Protect 20 Act 367-Gas Mains - Cattodic Protect 21 Act 387-Comm Equip Metscan 23 Act 397-Comm Equip Metscan 34 Act 397-Comm Equip Metscan 35 Act 397-Comm Equip Metscan 36 Act 305 St & Impr-LNG & LPG Dir Csts 37 Act 330 Other Eq-LNG & LPG Dir Csts 38 Total Gas Operation & Maintenance Labor 39 Inflation Adjustment Residual O&M 39 Inflation Adjustment Residual O&M

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 157 of 322

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29-Jun-05

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

Attachment AG-22-44

LOW WINTER LRG HI ANNUAL G-53 & T-53	28,494 66,754	31,681	4,611	25,728	3,014	469,283	217,782	11,402	1,268,577	5,791,979	23,008	25,478,826	593,165	1,486,057	/31,740	10,653	29.228.872	3,397	32,759	202,724	1,588,925	451,656	656,708	11,596,414	10,005,887	238,336	221,598	4,566	15,927	9,495	45,744	19,484	842,946	1,381,189
LOW WINTER HIGH ANNUAL G-52 & T-52	17,596 63,703	19,335	2,480	13,836	1,621	291,686	121,363	5.453	774,225	3,576,860	11,260	14,288,172	1,285,854	3,207,987	444,787	118,452	17,161,850	12,730	16,477	101,965	799,185	227,170	330,306	5,832,673	5,032,682	139,364	129,577	6,897	34,527	5,106	24,600	10,478	206,957	812,185
LOW WINTER MED ANNUAL G-51 & T-51	21,441	24,510	3,258	18,180	2,130	371,140	116,611	5,124	981,438	4,358,376	10,160	12,933,537	3,435,233	5,745,502	543,524	396,375	17 732 818	89,546	14,155	87,595	686,554	195,155	283,755	5,010,662	4,323,416	164,753	153,183	26,441	92,241	60,709	32,324	13,768	626,784	966,867
LOW WINTER LOW ANNUAL G-50 & T-50	0 12,378 77 77	12,627	969	5,404	633	170,594	50,416	2.288	505,611	2,516,064	3,647	6,203,261	2,175,857	5,741,708	244,875	244,033	8 717 767	169,200	3,514	21,747	170,449	48,451	70,447	1,243,984	1,073,363	82,197	76,424	16,748	58,425	1,994	609'6	4,093	338,823	498,401
INTER NNUAL T-43	7,480	8,327	2,519	9.14 14,054	1,646	119,560	55,058	2.020	333,442	1,520,567	4,864	6,425,813	167,390	370,677	186,201	86,516	431,106 7 392 187	773	8,291	51,308	402,146	114,311	166,208	2,934,970	2,532,419	62,570	58,176	1,288	4,495	5,187	24,988	10,643	223,848	368,390
HIGH WINTER LRG HI ANNUAL G-43 & T-43							•			<del></del>		Ó,					7							,										
ALLOC	EXP929 EXP930	EXP931	TLABPO	TLABLO	TLABLM	TLABDO	TLABOM TABOM	TI ABSA	GENPLT	REVCLAIM	EXP9123	PLT36780	PLT3813	PLT3803	EXP8519	TOTCDEP	PL 1300	EXP904S	EXP9040	PLT367BS	PLT367JC	PLT367CI	PLT367CP	PL T367CS	PLT367P	PLT3910E	PL T3911T	PLT397M	PL.T397E	PL_T304L	PLT305L	PLT320L	OMLAB	OTHOMINE
INTERNALLY DEVELOPED CONT-30	Acct 929-Duplicate Charges-Cr Acct 930-Miscellaneous General Exp	Acct 931 Rents Acct 932 Maintenance of General Plant	Total LPG Gas Operating Labor	lot LPG Gas Maintenence Labor Fotal LNG Gas Operating Labor	Tot LNG Gas Maintenence Labor	Total Transm & Distr Operating Labor	Fotal Transm & Distr Maintenance Labor	Total Sales Expense Labor	Total General Plant	Claimed Sales Revenues less Gas Costs	Sales Expense Accounts 912 to 913	Acct 367 Mains and Acct 380 Services	Acct 381, 382 & 383 - Meters & Hse Reg	Acct 380,381,382 & 383 - Serv, Met & Reg	Fransm & Distr Oper Accts 851 to 879	Fotal Customer Deposits	Acct 380 Offier Property on Cust's Prefit	Acct 904-Uncollectible Accts-Gas Sales	Acct 904-Uncollectible Accts-Other Rev	Acct 367-Gas Mains - Bare Steel	Acct 367-Gas Mains - Joint Clamping	Acct 367-Gas Mains - Cast Iron	Acct 367-Gas Mains - Cathodic Protect	Acct 367-Gas Mains - Coated Steel	Acct 367-Gas Mains - Plastic	Acct 391-Office Equipment	Acct 391-Office IT Equipment	Acct 397-Comm Equip Metscan	Acct 397-Comm Equip ERT/ITRON	Acct 304 Lnd Rghts-LNG & LPG Dir Csts	Acct 305 St & Impr-LNG & LPG Dir Csts	Acct 320 Other Eq-LNG & LPG Dir Csts	Total Gas Operation & Maintenance Labor	nflation Adjustment Residual O&M

Attachment AG-22-44

10TAL COMPANY INPUT Page 14, Line 8 Page 14, Line 12 Page 14, Line 22 Page 19, Line 22 Page 19, Line 27 Page 20, Line 19 Page 21, Line 4 Page 21, Line 4 Page 31, Line 23 Page 31, Line 5 Page 31, Line 6	k 7 & 11 & 16 & 16 scriotions
Page 14. Line 8 Page 14. Line 12 Page 14. Line 12 Page 14. Line 18 Page 14. Line 18 Page 19. Line 21 Page 19. Line 5 Page 19. Line 17 Page 20. Line 17 Page 20. Line 17 Page 20. Line 19 Page 21. Line 21 Page 21. Line 9 Page 21. Line 23 Page 3. Line 15. 16 & 17 Pag 11. Line 21 Page 3. Line 23 Page 3. Line 21 Page 3. Line 5 Page 3. Line 6 Page 3. Line 7 Page 3. Line 6 Page 3. Line 6 Page 3. Line 7 Page 3. Line 6	Page 4, Line 4 Page 4, Line 5 Page 4, Line 13 Page 4, Line 13 Page 2, Line 6 & 7 Page 2, Line 15 & 16 Page 2, Line 15 & 16 Page 2, Line 15 & 16 Page 22, Line 15 & 16 Page 22, Line 15 & 16
ALLOC EXP929 EXP930 EXP931 EXP931 EXP931 TLABPM TLABLM TLABCM TLA	PLT3910E PLT3911T PLT397M PLT397E PLT304L PLT305L PLT320L OMLAB
	31 Acct 391-Office Equipment 32 Actt 391-Office IT Equipment 33 Actt 397-Comm Equip Metscan 34 Actt 397-Comm Equip ERT/ITRON 35 Actt 304 Lnd Rghts-LNG & LPG Dir Csts 36 Actt 305 St & Impr-LNG & LPG Dir Csts 37 Actt 320 Other Eq-LNG & LPG Dir Csts 38 Total Gas Operation & Maintenance Labor 39 Inflation Adjustment Residual OXM

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 158 of 322

	HIGH WINTER HIGH ANNUAL G-42 & T-42	15,349,723 112,478	45,924,428 3,384,251 7,406 1,576,848 45,924,428 286,277 43,833,902 18,733,974 1,576,848 905,981	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 159 of 322
	HIGH WINTER MED ANNUAL G-41 & T-41	34,520,005 247,767	66,161,719 5,792,045 55,963 2,513,367 66,161,719 368,315 62,911,913 40,312,050 2,513,367 1,455,374	
	HIGH WINTER LOW ANNUAL G-40 & T-40	21,089,132 503,043	52,436,776 5,557,867 198,495 1,967,460 52,436,776 318,446 49,908,478 26,646,99 1,967,460 1,394,734	
	OUTDOOR LIGHTING	2,336 3	1,513 143 63 1,513 10 1,445 2,448 97	
	RESIDENTIAL NON-HEATING R-1 & R-2	5,529,189 630,563	40,473,034 4,862,132 396,597 1,550,515 40,473,034 273,963 38,512,198 10,391,321 1,550,515 1,380,124	
4	RESIDENTIAL HEATING R-3 & R-4	219,829,907 4,707,105	459,546,304 46,956,219 2,635,699 17,206,402 459,546,304 2,840,609 437,447,968 266,786,125 17,206,402 13,102,042	
	TOTAL	324,558,618 6,522,561	754.551.098 73.838,274 3.358,808 28,074.804 754,551.098 4,524,370 718.484,245 398,396,892 28,074,804 20,141,561	
	ALLOC	GASCOSTS EXP903T	BASIS1P BASIS1OM BASIS10 BASIS1 BASIS2 BASIS20 BASIS7P BASIS7P BASIS7OM BASIS7OM BASIS7OM	
	INTERNALLY DEVELOPED CONT-31	1 Total Gas Supply Expense 2 Acct 903-Cust Records & Coll Subtotal	MiSource Service Charges Allocators  MiSource Service Charges Allocators  Basis 1 - 50% Gross Plant Basis 10 - Number of Annual Customers Basis 10 - Number of Annual Customers Basis 2 - Gross Plant Basis 7 - 50% Deprec Plant Basis 7 - 50% Deprec Plant Basis 7 - 50% O&M less NIS 923  Basis Co 12 - Oth NiSource Serv Chrgs  Basis 3 - 4abor  Canada Annual Canada  Basis 3 - 4abor  Canada Annual Castomers  Basis 4 - 50% O&M less NIS 93  Basis 5 - 4abor  Canada Annual Castomers  Basis 7 - 50% O&M less NIS 93  Basis 7 - 50% O&M less NIS 93	38 39 40 40

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

10:27 AM

29-Jun-05

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 160 of 322

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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Attachment AG-22-44

	LOW WINTER LRG HI ANNUAL G-53 & T-53	2,772,528 73,372	32,523,900	2,321,920	262	1,130,661	32,523,900	167,111	31,066,806	5,094,448	1,130,661	629,652
	LOW WINTER HIGH ANNUAL G-52 & T-52	5,793,209 47,108	19,092,700	1,408,840	2,979	661,139	19,092,700	98,919	18,242,538	7,202,049	661,139	378,254
S COMPANY RVICE STUDY ECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51	11,915,793 83,648	20,122,202	1,823,507	20,955	781,586	20,122,202	114,847	19,121,463	13,739,299	781,586	456,525
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50	3,840,213 98,958	9,839,523	1,112,247	39,595	389,941	9,839,523	62,357	9,343,829	4,952,460	389,941	273,677
	HIGH WINTER LRG HI ANNUAL G-43 & T-43	3,916,584 18,517	8,428,999	619,134	181	296,832	8,428,999	43,521	8,043,705	4,535,718	296,832	165,100
10:27 AM	ALLOC	GASCOSTS EXP903T	BASIS1P	BASIS10M	BASIS10	BASIS11	BASIS2	BASIS20	BASIS7P	BASIS70M	BASIS9	BASCO12
29-Jun-05	INTERNALLY DEVELOPED CONT-31	1 Total Gas Supply Expense 2 Acct 903-Cust Records & Coll Subtotal 3 4 5	12 Basis 1 - 50% Gross Plant		14 Basis 10 - Number of Annual Customers	15 Basis 11 - Labor		17 Basis 20 - Total Direct Billed	18 Basis 7 - 50% Deprec Plant	19 Basis 7 - 50% O&M less NIS 923		

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 161 of 322

6/30/2005 11:11 AM

10:27 AM 29-Jun-05

Attachment AG-22-44

TOTAL COMPANY INPUT	GASCOSTS Page 10 , Line 7 EXP903T Pg 12 . Line 3 to 5	Page 4 , Line 18 See Allocator Descriptions Page 26 , Line 31 Page 22 , Line 21 Page 4 , Line 28 See Allocator Descriptions See Allocator Descriptions Page 22 , Line 21 Page 13 , Line 21 Page 22 , Line 21
ALLOC	GASCOSTS EXP903T	BASIS1P BASIS10 BASIS10 BASIS11 BASIS2 BASIS2 BASIS7P BASIS7P BASIS7P BASIS7P BASIS7P BASIS7P BASIS7P BASIS7P BASIS7P
INTERNALLY DEVELOPED CONT-31	Total Gas Supply Expense Acct 903-Cust Records & Coll Subtotal	NiSource Service Charges Allocators Basis 1 - 50% Gross Plant Basis 1 - 50% O&M less Gas & NIS 923 Basis 10 - Number of Annual Customers Basis 11 - Labor Basis 2 - Total Direct Billed Basis 2 - 50% Deprec Plant Basis 7 - 50% Deprec Plant Basis 9 - Labor Basis 9 - Labor

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 162 of 322

Attachment AG-22.44	HIGH WINTER HIGH ANNUAL G-42 & T-42	22,321,850 2,913,844 4,286,966 13,793,415 396,525 324,983 (82,199) (127,701) 816,017	9.050% 17,483,688 44,135,406 23,883,250 7,432
Atta	HIGH WINTER MED ANNUAL G-41 & T-41	46.870,369 8.796.996 3,200,449 31,776.012 924,653 717.301 (253,911) (94,414) 1,803,283 1,927,700	9.050% 38,636,479 54,160,592 48,258,681 56,195
	HIGH WINTER LOW ANNUAL G-40 & T-40	31,946,429 9,322,851 646,079 20,118,078 602,472 438,488 (250,352) (19,193) 1,088,006 1,178,409	9.050% 23,311,210 25,211,236 33,596,561 200,206
		1 1 1 2	
COMPANY RVICE STUDY CEMBER 31, 2004	OUTDOOR LIGHTING	2.726 479 0 2,066 7 47 47 125	9.050% 2,728 2,728 2,692
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	RESIDENTIAL NON-HEATING R-1 & R-2	10,830,018 5,317,329 1,127 5,037,827 66,089 109,207 0 298,440 298,446	9.050% 6.394.258 6.396,166 16,939,304 400,515
12	RESIDENTIAL HEATING R-3 & R-4	323.429,755 90,306,804 23,420 211,649,336 6,662,418 4,941,538 (1,714,352) (1,714,352) 11,561,095	9.050% 247.703.740 247.783.289 331.383.347 2,666,494
	TOTAL COMPANY	478,651,282 122,553,551 17,846,899 30,7478,651 9,129,632 7,118,165 (2,307,187) (2,48,396) 17,079,967	9.050% 365,949,048 493,498,312 500,066,007 3,395,936
10:27 AM	ALLOC		
29-Jun-05	INTERNALLY DEVELOPED CONT-32	REVENUES FROM GAS SALES  1 Revenues Firm Sales of Gas  2 Annual Base Revenues - Sales Actual  3 Annual Base Revenues - Trans Actual  4 GAF Direct Revenues  5 Production & Storage Revenues  6 GAF Indirect Bad Debt Revenues  7 Weather Normalztn Adj Base Rev-Sales  8 Weather Normalztn Adj Base Rev-Trans  9 GAF Deferred Direct Gas Revenues  10 GAF Indirect Revenues	REVENUE REQUIREMENT INPUTS  1 Claimed Rate of Return 2 Annual Booked Therm Sales 3 Annual Booked Therm Throughput 4 Proposed Sales Revenues 5 Total Annual Bills

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 163 of 322

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
	27 AM	

COMPANY VICE STUDY JEMBER 31, 2004	LOW WINTER LOW WINTER LOW WINTER MED ANNUAL HIGH ANNUAL LRG HI ANNUAL G-51 & T-51 G-52 & T-52 G-53 & T-53	15,241,815 9,011,447 8,317,714 2,437,223 913,027 401,385 1,207,966 2,393,361 5,168,050 10,545,356 5,181,132 2,490,440 168,782 91,183 54,183 2,42,185 121,626 56,450 0 0 640,304 311,118 147,207 650,856 326,863 151,705	9.050% 9.050% 9.050% 13,718,907 6.665,891 3.153,997 21,369,383 25,505,268 54,222,227 16,274,168 9,370,069 8,564,507 24,073 2,899
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER L LOW ANNUAL A G-50 & T-50	5,775,878 1,654,681 254,714 3,503,816 71,008 84,141 0 0 207,518 226,123	9.050% 4,446.204 5,243,986 6,356.277 39,908
	HIGH WINTER LRG HI ANNUAL G-43 & T-43	4,903.279 488,932 664,767 3,381,173 92,312 82,200 (6,373) (5,584) 206,853 220,906	9.050% 4,431,946 9,468,031 5,437,151
10:27 AM	ALLOC		
29-Jun-05	INTERNALLY DEVELOPED CONT-32	REVENUES FROM GAS SALES 1 Revenues Firm Sales of Gas 2 Annual Base Revenues - Sales Actual 3 Annual Base Rev - Trans Actual 4 GAF Direct Revenues 5 Production & Storage Revenues 6 GAF Indirect Bad Debt Revenues 7 Weather Normaizth Adj Base Rev-Sales 8 Weather Normaizth Adj Base Rev-Trans 9 GAF Deferred Direct Gas Revenues 10 GAF Indirect Revenues	Claimed Rate of Return Sales 3 Annual Booked Therm Throughput 4 Proposed Sales Revenues 5 Total Annual Bills

Attachment AG-22-44	HIGH WINTER HIGH ANNUAL G-42 & T-42	0.04999 0.04999 0.04999 0.09586	0.06311	0.03264		0.09586	0.04862	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 164 of 322
Att	HIGH WINTER MED ANNUAL G-41 & T-41	0.12724 0.12724 0.12724 0.12251	0.12589	0.05699		0.12251	0.07828	
	HIGH WINTER LOW ANNUAL G-40 & T-40	0.08528 0.08528 0.08528 0.06024	0.07812	0.02681 0.08528		0.06024	0.07126	
S COMPANY RVICE STUDY ECEMBER 31. 2004	OUTDOOR LIGHTING	0.00000	0.00000	0.00003		0.0000	0.00000	
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	RESIDENTIAL NON-HEATING R-1 & R-2	0.00508 0.00508 0.00508 0.01014	0.00653	0.00508		0.01014	0.06501	
12	RESIDENTIAL HEATING R-3 & R-4	0.69669 0.69669 0.69669 0.52906	0.64875 0.64875	0.69669		0.52906	0.63561	
	TOTAL	1.00000 1.00000 1.00000 1.00000 28.6%	1.00000	1.00000		1.00000	1.00000	
10:27 AM	ALLOC		DEMLPG DEMLNG	DBASE DREMAIN		DISTR	PENSION	
29-Jun-05	RATIO TABLE-33	PRODUCTION ALLOCATORS Design Day Remaining Demands - Sales LPG Production Allocator - Prod Function LNG Production Allocator - Prod Function LNG Production Allocator - Distr Function LPG & LNG Prod Alloc - Distr Function LPG & LNG Distr Pressure Support %	PROD-PRESSURE SUPP ALLOC PROD-PRESSURE SUPP ALLOC PROD & Presure Support Alloc	12 13 GAS COST ALLOCATORS 14 Base Demand Gas Costs 15 Remaining Demand Gas Costs 16	17 18 DISTRIBUTION ALLOCATORS	1 Distribution Allocator	2 3 Pension & PBOP Expense Allocator 4	5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 165 of 322

6/30/2005 11:11 AM

BAY STALE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004	
	10:27 AM		
	30-nr		

AG-22-44 COS.xls COST OF SERVICE
Page 34-1

Attachment AG-22-44	HIGH WINTER HIGH ANNUAL G-42 & T-42	0.03260	0.04778				Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 166 of 322
Att	HIGH WINTER MED ANNUAL G-41 & T-41	0.05719	0.10558				
	HIGH WINTER LOW ANNUAL G-40 & T-40	0.02673 0.07750	0.06370				
S COMPANY RVICE STUDY ECEMBER 31, 2004	OUTDOOR LIGHTING	0.00003	0.00001				
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	RESIDENTIAL NON-HEATING R-1 & R-2	0.04788 0.00589	0.01747				
12	RESIDENTIAL HEATING R-3 & R-4	0.61477	0.67688				
	TOTAL	1.00000	1.00000				
10:27 AM	ALLOC	EBASE EREMAIN					
29-Jun-05	RATIO TABLE CONT-34	COMMODITY RELATED Base Commodity Gas Costs Remaining Commodity Gas Costs	Annual Therm Firm Sales Sendout				
	RATIO TA	Base Corr Remaining		0 1 2 2 2 4 5 9 5	20 21 23 24	33 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	35 55

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 167 of 322

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 200	
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	LOW WINTER LRG HI ANNUAL G-53 & T-53	0.00674	0.00862
	LOW WINTER HIGH ANNUAL G-52 & T-52	0.05395	0.01822
s COMPANY RVICE STUDY ECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51	0.10163	0.03749
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50	0.03104	0.01215
	HIGH WINTER LRG HI ANNUAL G-43 & T-43	0.01953 0.00876	0.01211
10:27 AM	ALLOC	EBASE EREMAIN	
29-Jun-05	RATIO TABLE CONT-34 COMMODITY RELATED	1 Base Commodity Gas Costs 2 Remaining Commodity Gas Costs 3 4	5 Annual Therm Firm Sales Sendout 8 9 10 11 12 13 14 15 16 17 18 20 21 22 23 24 25 26 30 31 33 34

Attachment AG-22-44	HIGH WINTER HIGH ANNUAL G-42 & T-42	0.02089 0.02812 0.02812 0.02812 0.06925 0.10555 0.09586 0.09586 0.09586 0.09586 0.09586 0.09586 0.09586 0.09586 0.09586 0.09586 0.09586 0.09586 0.09586	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 168 of 322
<del>-</del>	HIGH WINTER MED ANNUAL G-41 & T-41	0.02697 0.09576 0.09576 0.09576 0.12251 0.12251 0.12251 0.01662 0.01662 0.06321 0.06321 0.06321 0.06321 0.06321 0.06321 0.06321	
	HIGH WINTER LOW ANNUAL G-40 & T-40	0.07815 0.08120 0.08120 0.36215 0.36215 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06001 0.05509 0.05509 0.05509	
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	OUTDOOR	0.00000.0 0.000000.0 0.000000.0 0.000000	
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY MONTHS ENDED DECEMBER 31,	RESIDENTIAL NON-HEATING R-1 & R-2	0.10922 0.09388 0.09388 0.09388 0.00007 0.00114 0.01014 0.01014 0.01014 0.01014 0.01014 0.006552 0.06552 0.01014	
12	RESIDENTIAL HEATING R-3 & R-4	0.72588 0.60958 0.60958 0.01269 0.01131 0.52906 0.52906 0.73673 0.73673 0.73673 0.73673 0.73673 0.73673 0.73673 0.73673 0.77718	
	TOTAL COMPANY	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	
10:27 AM	ALLOC	CUST380 CUST381 CUST382 CUST383 CUST383 CUST7860 CUST3862 CUST3863	
29-Jun-05	RATIO TABLE CONT-35	1 Acct 380 Gas Services 2 Acct 381 Gas Meters 3 Acct 381 Gas Meters 4 Acct 382 Gas Regulators 5 Customer Deposits 6 Transportation Customers 7 Acct 386.0 Gas Water Heaters 8 Acct 386.0 Gas Water Heaters 9 Acct 386.3 Conversion Burners 10 Acct 386.3 Conversion Burners 11 Acct 386.3 Conversion Burners 12 Acct 386.3 Conversion Burners 14 Acct 382-Revenue Guardian Care & C/S 13 Acct 902 Meter Reading Expense 14 Acct 902-Cust Records & Collection Exp 15 Acct 912-Demonstrating & Selling Exp 16 Acct 913-Advertising Expense 17 Acct 903 Collections Expense 18 Acct 903 Collections Expense 19 Acct 903 Collections Expense 20 21 21 22 22 22 23 33 33 33 33 33 34 34 34 34 34 34 34 34	3.7 3.7

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 169 of 322

	LOW WINTER LRG HI ANNUAL G-53 & T-53	0.00390 0.00708 0.00708 0.00000 0.01819 0.07936 0.07936 0.07335 0.07336 0.07239 0.00219 0.00219 0.00219 0.00249 0.00249
	LOW WINTER HIGH ANNUAL G-52 & T-52	0.00840 0.01536 0.01536 0.03397 0.03892 0.03892 0.03892 0.03892 0.03892 0.03892 0.02628 0.02628 0.02628 0.02628
S COMPANY FRVICE STUDY ECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51	0.01010 0.04103 0.04103 0.04103 0.14961 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50	0.01559 0.02599 0.02599 0.02599 0.00851 0.00851 0.00851 0.01183 0.01121 0.01121 0.01927
	HIGH WINTER LRG HI ANNUAL G-43 & T-43	0.00089 0.00200 0.00200 0.00200 0.03847 0.03847 0.02099 0.02099 0.00054 0.00065 0.00065 0.00065 0.00065 0.00065 0.00065
10:27 AM	ALLOC	CUST380 CUST381 CUST382 CUST783 CUST78 CUST7860 CUST7860 CUST7863 CUST7862 CUST7863 CUST787
29-Jun-05	RATIO TABLE CONT-35	1 Act 380 Gas Services 2 Act 381 Gas Meters 3 Act 382 Meter Installations 4 Act 383 Gas Regulators 5 Customer Deposits 7 Act 386.0 Gas Water Heaters 8 Act 386.0 Cascade Diamond Boilers 9 Act 386.2 Cascade Diamond Boilers 9 Act 386.2 Cascade Diamond Boilers 11 Act 487-Return Check Charges 12 Act 386.2 Cascade Diamond Boilers 13 Act 386.2 Cascade Diamond Boilers 14 Act 487-Return Check Charges 15 Act 487-Return Check Charges 16 Act 487-Return Check Charges 17 Act 487-Return Check Charges 18 Act 903-Cust Records & Collection Exp 19 Act 903-Cust Records & Collection Exp 19 Act 903-Customer installations Exp 19 Act 903 Collections Expense 19 Act 903 Collections Expense 20 22 23 24 25 25 26 26 26 26 26 26 26 26 26 26 26 26 26

10:27 AM
29~Jun-05

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

Attachment AG-22-44

HIGH WINTER HIGH ANNUAL G-42 & T-42			0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000		0.00000 0.00000 1.00000 0.00000 0.00000 0.00000	Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 170 of 322
HIGH V HIGH A G-42 (					00000000	•
HIGH WINTER MED ANNUAL G-41 & T-41			0.00000 0.00000 0.00000 0.00000 1.00000 0.00000 0.00000 0.00000 0.00000		0.00000 1.00000 0.00000 0.00000 0.00000 0.00000 0.00000	
HIGH WINTER LOW ANNUAL G-40 & T-40			0.00000 0.00000 0.00000 1.00000 0.00000 0.00000 0.00000 0.00000 0.00000		1.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	
			000000000000000000000000000000000000000		000000000000000000000000000000000000000	
OUTDOOR			0.00000 0.00000 1.00000 0.00000 0.00000 0.00000 0.00000 0.00000		0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	
RESIDENTIAL NON-HEATING R-1 & R-2			0.00000 1.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000		0.00000	
RESIDENTIAL HEATING R-3 & R-4			1.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000		0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	
TOTAL			1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000		1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	
ALLOC			C904R3 C904R1 C904OL C904R41 C904R42 C904R43 C904R50 C904R52 C904R52		C487R40 C487R41 C487R42 C487R43 C487R50 C487R51 C487R53	
RATIO TABLE CONT-36	INTERNALLY DEVELOPED	UNCOLLECTIBLE ACCOUNTS	Residential Heating Rate R-3 & R-4 Residential Non-Heating Rate R-1 & R-2 Outdoor Lightling High Winter Low Annual Rate G40 & T40 High Winter Med Annual Rate G41 & T41 High Winter High Annual Rate G42 & T42 High Wint Large Annual Rate G42 & T42 High Winter Low Annual Rate G50 & T50 Low Winter Low Annual Rate G50 & T50 Low Winter High Annual Rate G52 & T55 Low Winter High Annual Rate G52 & T55 Low Winter High Annual Rate G52 & T55 Low Wint Large Annual Rate G53 & T55	LATE PAYMENT CHARGES	High Winter Low Annual Rate G40 & T40 High Winter Med Annual Rate G41 & T41 High Winter High Annual Rate G42 & T42 High Wint Large Annual Rate G53 & T43 Low Winter Low Annual Rate G50 & T50 Low Winter Med Annual Rate G51 & T51 Low Winter High Annual Rate G52 & T52 Low Wint Large Annual Rate G53 & T52 Low Wint Large Annual Rate	

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 171 of 322

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BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LRG HI ANNUAL G-53 & T-53			0.00000	0.00000	0.00000	0.00000	0.00000	0.0000	0.00000	1.00000		00000	0.0000	0.0000	0.00000	0.00000	0,00000	1 00000								
	LOW WINTER HIGH ANNUAL G-52 & T-52			0.00000	0.0000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000		0	0.00000	0.00000	0.00000	0.00000	0.00000	00000								
	LOW WINTER MED ANNUAL G-51 & T-51			0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000		9	0.0000	0.00000	0.0000	0.00000	1.00000	0.00000								
	LOW WINTER LOW ANNUAL G-50 & T-50			0.00000	0.00000	0.00000	000000	0.00000	0.0000	000000	0.00000			00000.0	00000:0	0.00000	1.00000	0.0000	000000								
	HIGH WINTER LRG HI ANNUAL G-43 & T-43			0.00000	0.0000	0.00000	0.00000	1.00000	0.00000	0.0000	0.00000		4	0.0000	0.00000	1.00000	0.00000	0.00000	0,000,0								
10:27 AM	ALLOC			C904R3 C904R1	C904OL	C904R40	C904R42	C904R43	C904T51	C904R52	C904R53			C487R40	C487R42	C487R43	C487R50	C487T51	C48/R52								
29-Jun-05	RATIO TABLE CONT-36	INTERNALLY DEVELOPED	UNCOLLECTIBLE ACCOUNTS	1 Residential Heating Rate R-3 & R-4 2 Residential Non-Heating Rate R-1 & R-2		4 High Winter Low Ahnual Rate G40 & 140 5 High Winter Med Ahnual Rate G41 & T41		7 High Wint Large Annual Rate G43 & T43			11 Low Wint Large Annual Rate G53 & T53	13 LATE PAYMENT CHARGES	The state of the s		17 High Winter High Annual Rate G41 & 141				21 Low Winter High Annual Rate Goz & 152	24	25	26	27	20	30	 32	}

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 172 of 322

10:27 AM 29-Jun-05

TOTAL COMPANY INPUT			Page 23 , Line 10, Col 2	Page 23 , Line 10, Col 3	Page 23 , Line 10, Col 4	Page 23 , Line 10, Col 5	Page 23 , Line 10, Col 6	Page 23 , Line 10, Col 7	Page 23 , Line 10, Col 8	Page 23 , Line 10, Col 9	Page 23 , Line 10, Col 10	Page 23 , Line 10, Col 11	Page 23 , Line 10, Col 12	
ALLOC			C904R3	C904R1	C904OL	C904R40	C904R41	C904R42	C904R43	C904R50	C904T51	C904R52	C904R53	
RATIO TABLE CONT-36	INTERNALLY DEVELOPED	UNCOLLECTIBLE ACCOUNTS	1 Residential Heating Rate R-3 & R-4	2 Residential Non-Heating Rate R-1 & R-2	3 Outdoor Lighting	4 High Winter Low Annual Rate G40 & T40	5 High Winter Med Annual Rate G41 & T41	6 High Winter High Annual Rate G42 & T42	7 High Wint Large Annual Rate G43 & T43	8 Low Winter Low Annual Rate G50 & T50	9 Low Winter Med Annual Rate G51 & T51	10 Low Winter High Annual Rate G52 & T52	11 Low Wint Large Annual Rate G53 & T53	2
				. •		•	/	-				7	·	

High Wir High Wir High Wir Low Wir Low Wir Low Wir	15				
High Winter Low Annual Rate G40 & T40 High Winter Med Annual Rate G41 & T41 High Winter Med Annual Rate G42 & T42 High Wint Large Annual Rate G43 & T43 Low Winter Low Annual Rate G50 & T50 Low Winter Low James Rate G50 & T50 Low Winter Large Annual Rate G53 & T53 Line C487R53 Page 23 , Line C487R53	13	LATE PAYMENT CHARGES			
High Winter Low Annual Rate G40 & T40 C487R40 Page 23 , Line High Winter Med Annual Rate G41 & T41 C487R41 Page 23 , Line High Winter High Annual Rate G42 & T42 C487R42 Page 23 , Line Low Winter Low Annual Rate G50 & T50 C487R50 Page 23 , Line Low Winter Migh Annual Rate G52 & T52 C487R52 Page 23 , Line Low Wint Large Annual Rate G52 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Mint Large Annual Rate G53 & T53 C487R53 Page 23 , Line L	7	THE PARTY OF THE P			
High Winter Med Annual Rate G41 & T41 C487R41 Page 23 , Line High Winter High Annual Rate G42 & T42 C487R42 Page 23 , Line High Wint Large Annual Rate G50 & T50 C487R50 Page 23 , Line Low Winter Med Annual Rate G51 & T51 C487T51 Page 23 , Line Low Winter High Annual Rate G52 & T52 C487R52 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line	5	High Winter Low Annual Rate G40 & T40	C487R40	Page 23 , Line 10, Col 5	
High Winter High Annual Rate G42 & T42 C487R42 Page 23 , Line Liby Wint Large Annual Rate G43 & T43 C487R43 Page 23 , Line Low Winter Med Annual Rate G50 & T50 C487R50 Page 23 , Line Low Wint Large Annual Rate G52 & T52 C487R52 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low	16	High Winter Med Annual Rate G41 & T41	C487R41	Page 23 , Line 10, Col 6	
High Wint Large Annual Rate G43 & T43 C487R43 Page 23 , Line Low Winter Low Annual Rate G50 & T50 C487R50 Page 23 , Line Low Winter High Annual Rate G52 & T52 C487R52 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low	17	High Winter High Annual Rate G42 & T42	C487R42	Page 23 , Line 10, Col 7	
Low Winter Low Annual Rate G50 & T50 C487R50 Page 23 , Line Low Winter Med Annual Rate G51 & T51 C487T51 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line	∞	High Wint Large Annual Rate G43 & T43	C487R43	23, Line	
Low Winter Med Annual Rate G51 & T51 C487T51 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line	0	Low Winter Low Annual Rate G50 & T50	C487R50	Page 23 , Line 10, Col 9	
Low Wint Large Annual Rate G52 & T52 C487R52 Page 23 , Line Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line	20	Low Winter Med Annual Rate G51 & T51	C487T51	23, Line	0
Low Wint Large Annual Rate G53 & T53 C487R53 Page 23 , Line 10.	21	Low Winter High Annual Rate G52 & T52	C487R52	23, Line	<b>~</b>
23 26 26 27 29 30 31 33 33	22	Low Wint Large Annual Rate G53 & T53	C487R53	23 , Line 10,	7
24 25 26 27 28 30 31 33 33	23				
25 26 27 28 39 31 33 33	24				
26 27 28 29 30 31 33	25				
27 28 29 30 31 33	56				
28 29 30 31 33 33	27				
29 30 31 32 33	28				
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3.2 3.3 3.3	30				
3.2 3.3	~				
33	32				
	33				

Bay State Gas Company Bay State Gas Company D.T.E. 05-27 DAM Berlinent AG-22-44(1)

Att	HIGH WINTER MED ANNUAL G-41 & T-41	0.08768 0.08952 0.08952 0.08952 0.12589 0.12589 0.12589 0.12251 0.12251 0.12251 0.02576 0.09576 0.09576 0.09576 0.08952	0.12589 0.12589 0.12589
	HIGH WINTER LOW ANNUAL G-40 & T-40	0.06949 0.07008 0.07008 0.07812 0.07812 0.07812 0.07812 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.06024 0.07008	0.07812 0.07812 0.07812
S COMPANY FRVICE STUDY ECEMBER 31, 2004	OUTDOOR	000000 0 0 000000 0 0 000000 0 0 000000	0.00000
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	RESIDENTIAL NON-HEATING R-1 & R-2	0.05364 0.05523 0.05523 0.00553 0.00653 0.00653 0.01014 0.05523	0.00653 0.00653 0.00653
55	RESIDENTIAL HEATING R-3 & R-4	0.60903 0.61288 0.60903 0.60903 0.64875 0.64875 0.64875 0.52906 0.64875 0.64875 0.64875 0.64875	0.64875 0.64875 0.64875
	TOTAL	1,00000 1,0000 1,00000 1,0	1.00000 1.00000 1.00000
10:27 AM	ALLOC	PLANT LABOR PLASOR PLASOS PLT301 PLT303 PLT303 PLT310 PLT321 PLT321 PLT326 PLT366 PLT366 PLT366 PLT366 PLT366 PLT368 PLT368 PLT389 PLT389 PLT389 PLT389 PLT389 PLT399 PLT398 PLT399 PLT398 PLT399	LABLO EXP754 EXP757
29-Jun-05	INTERNALLY DEVELOPED-37	1 Total Gas Plant in Service 2 Sum of Allocated Labor Expense 3 Acct 301 Organization 4 Acct 303 Misc. Intangible Plant 5 Acct 303 Misc. Intangible Plant 7 Acct 320 Other Equipment 8 Acct 321 L.N.G. Equipment 9 Acct 368 Kight of Way 10 Acct 366 Structures & Improvements 14 Acct 367 Gas Mains 1 Acct 369 Meas. & Reg. Station Equipment 2 Acct 369 Meas. & Reg. Station Equipment 3 Acct 369 Meas. & Reg. Station Equipment 4 Acct 369 Meas. & Reg. Station Equipment 5 Acct 380 Gas Services 6 Acct 380 Gas Water Heaters 7 Acct 382 Merer Installations 7 Acct 382 Conversion Burners 10 Acct 386 Cascade Diamond Boilers 10 Acct 386 Cascade Diamond Boilers 11 Acct 397 Other Equipment 12 Acct 397 Other Equipment 13 Acct 397 Communication Equipment 14 Acct 397 Communication Equipment 15 Acct 398 Niccellaneous Equipment 16 Acct 398 Niccellaneous Equipment 17 Acct 398 Niccellaneous Equipment 18 Acct 391 Office Equipment 19 Acct 392 Transportation Equipment 19 Acct 393 Niccellaneous Equipment 19 Acct 394 Communication Equipment 19 Acct 395 Prod Labor Accts 777 to 735 10 Acct 717-LPG Gas Expenses 11 LPG Gas Prod Labor Accts 771 to 735 12 Acct 735-Miscellaneous Production Exp 14 Acct 735-Miscellaneous Production Exp 15 Acct 741-Maintenance of Struct & Improv 16 Acct 742-Maintenance of Struct & Improv 17 Acct 342-Maintenance of Struct & Improv	

HIGH ANNUAL G-42 & T-42

HIGH WINTER

Attachment AG-22-44

0.06086 0.05617 0.060311 0.06311 0.063311 0.09586 0.09586 0.02812 0.02812 0.09586 0.02812 0.09586 0.09581 0.09581 0.09581 0.09581 0.09581

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 174 of 322

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 21
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Attachment AG-22-44

29-Jun-05	i 10:27 AM		DATISTALE OF SCHIZANI GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	SCEMBER 31, 2004		CHINNE	
	AL OC	HIGH WINTER LRG HI ANNUAL G-43 & T-43	LOW WINTER LOW ANNUAL G-50 & T-50	LOW WINTER MED ANNUAL G-51 & T-51	LOW WINTER HIGH ANNUAL G-52 & T-52	LOW WINTER LRG HI ANNUAL G-53 & T-53	
INTERNALLY DEVELOPED-37			3	3	5	3	
Fotal Gas Plant In Service	PLANT	0.01117	0.01304	0.02667	0.02530	0.04310	
Sum of Allocated Labor Expense	LABOR	0.01057	0.01389	0.02784	0.02355	0.04027	
Acct 301 Organization	PL T301	0.01117	0.01304	0.02667	0.02530	0.04310	
Acct 303 Misc. Intangible Plant	PLT303	0.01057	0.01389	0.02784	0.02355	0.04027	
Acct 305 Structures & Improvements	PLT305	0.01413	0.00543	0.01828	0.01391	0.02586	
Acct 311 L.P. Gas Equipment	PL 1311	0.01413	0.00543	0.01828	0.01391	0.02586 0.02586	
Accioso Oriel Equipment	PI T321	0.01413	0.00543	0.01828	0.01391	0.02586	
Acct 365 Right of Way	PL 1365	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 366 Structures & Improvements	PLT366	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 367 Gas Mains	PLT367	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 368 Compressor Station Equipment	PLT368	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 369 Meas. & Reg. Station Equip	PLT369	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 380 Gas Services	PLT380	0.00089	0.01559	0.01010	0.00840	0.00390	
Acct 381 Gas Meters	PLT381	0.00200	0.02599	0.04103	0.01536	0.00708	
Acct 382 Meter Installations	PLT382	0.00200	0.02599	0.04103	0.01536	0.00708	
Acct 383 Gas Regulators	PLT383	0.00200	0.02599	0.04103	0.01536	0.00708	
Acct 386 Gas Water Heaters	PL 13860	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 386 Cascade Diamond Boilers	FL 13862	0.02009	0.00031	0.03429	0.03992	0.07936	
Acct 386 Conversion Burners	Pt. 1 5003	0.0200	0.00031	0.03429	0.03992	0.07936	
Acct 38/ Other Equipment	FL 136/ Pf T379	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 300 Structures & Improvements	PLT390	0.01057	0.01389	0.02784	0.02355	0.04027	
Acct 391 Office Equipment	Pt.T391	0.01057	0.01389	0.02784	0.02355	0.04027	
Acct 392 Transportation Equipment	PLT392	0.01057	0.01389	0.02784	0.02355	0.04027	
Acct 393 Stores Equipment	PLT393	0.01057	0.01389	0.02784	0.02355	0.04027	
Acct 394 Tools, Shop & Garage Equip	PLT394	0.01057	0.01389	0.02784	0.02355	0.04027	
Acct 396 Power Operated Equipment	PLT396	0.01057	0.01389	0.02784	0.02355	0.04027	
Acct 397 Communication Equip-Other	PLT3970	0.01057	0.01389	0.02784	0.02355	0.04027	
Acct 398 Miscellaneous Equipment	PLT398	0.01057	0.01389	0.02784	0.02355	0.04027	
LPG Gas Prod Labor Accts 717 to 735	LABPO	0.01413	0.00543	0.01828	0.01391	0.02586	
Acct 717-LPG Gas Expenses	EXP717	0.01413	0.00543	0.01828	0.01391	0.02586	
Acct 719-Handling Expense	EXP719	0.01413	0.00543	0.01828	0.01391	0.02586	
Acct 735-Miscellaneous Production Exp	EXP735	0.01413	0.00543	0.01828	0.01391	0.02586	
LPG Gas Prod Labor Accts 741 to 742	LABPM	0.01413	0.00543	0.01828	0.01391	0.02586	
Acct 741-Maintenance of Struct & Improv	EXP741	0.01413	0.00543	0.01828	0.01391	0.02586	
Acct 742-Maintenance of Production Eq	EXP742	0.01413	0.00543	0.01828	0.01391	0.02586	
LNG Gas Prod Labor Accts 754 to 777	LABLO	0.01413	0.00543	0.01626	0.01391	0.02500	
Acct 754-Liquefaction Expense	EXP/54	0.01413	0,00043	0.01020	0.01391	0.02360	
Acct 757-Vaporization Expense	EXP/5/	0.01413	240000	0.01020	2000	0.02,000	

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 175 of 322

			TOTAL COMPANY
		ALLOC	TUGNI
	INTERNALLY DEVELOPED-37		
<b>4</b> ····	Total Gas Plant In Service	PLANT	Page 4 , Line 18
2	Sum of Allocated Labor Expense	LABOR	Page 22 , Line 21
<u>ښ</u>	Acct 301 Organization	PLT301	Page 2, Line 3
4	Acct 303 Misc. Intangible Plant	PLT303	Page 2 , Line 4
ξ	Acct 305 Structures & Improvements	PLT305	Page 2 , Line 13
9	Acct 311 L.P. Gas Equipment	PLT311	Ń
7	Acct 320 Other Equipment	PLT320	N.
œ	Acct 321 L.N.G. Equipment	PLT321	2, Line
6	Acct 365 Right of Way	PLT365	Page 3, Line 2
10	Acct 366 Structures & Improvements	PLT366	Page 3, Line 3
-	Acct 367 Gas Mains	PLT367	Page 3, Line 11
12	Acct 368 Compressor Station Equipment	PL_T368	с С
£.5	Acct 369 Meas. & Reg. Station Equip	PLT369	Page 3, Line 13
14	Acct 380 Gas Services	PL T380	٠ دع
15	Acct 381 Gas Meters	PLT381	62
36	Acct 382 Meter Installations	PLT382	33
17	Acct 383 Gas Regulators	PLT383	ć
18	Acct 386 Gas Water Heaters	PLT3860	82
19	Acct 386 Cascade Diamond Boilers	PLT3862	~
20	Acct 386 Conversion Burners	Pt.T3863	3, Line
27	Acct 387 Other Equipment	PLT387	3, Line
22	Acct 379 Other Equipment	PLT379	m
23	Acct 390 Structures & Improvements	Pt_T390	4 , Line
24	Acct 391 Office Equipment	PLT391	Ξ.
25	Acct 392 Transportation Equipment	PLT392	<u>.</u>
26	Acct 393 Stores Equipment	PLT393	
27	Acct 394 Tools, Shop & Garage Equip	PLT394	₹.
28	Acct 396 Power Operated Equipment	PLT396	, Line 10
29	Acct 397 Communication Equip-Other	PLT3970	Page 4, Line 11 & 12
30	Acct 398 Miscellaneous Equipment	PLT398	Page 4 , Line 16
31	LPG Gas Prod Labor Accts 717 to 735	LABPO	Pg 19, Ln 2 to 4
32	Acct 717-LPG Gas Expenses	EXP717	Page 9 , Line 2
33	Acct 719-Handling Expense	EXP719	Page 9, Line 3
34	Acct 735-Miscellaneous Production Exp	EXP735	Page 9, Line 6
35	LPG Gas Prod Labor Accts 741 to 742	LABPM	Pg 19, Ln 9 to 10
36	Acct 741-Maintenance of Struct & Improv	EXP741	Page 9 , Line 9
37	Acct 742-Maintenance of Production Eq	EXP742	Page 9, Line 10
38	LNG Gas Prod Labor Accts 754 to 777	LABLO	Pg 19, Ln 14 to 18
39	Acct 754-Liquefaction Expense	EXP754	Page 9 Line 14
40	Acct 757-Vaporization Expense	EXP757	Page 9 , Line 15

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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HIGH WINTER HIGH ANNUAL G-42 & T-42	Bay State Gas Compared by State Gas Compared	any -27 -(1) 322
HIGH WINTER MED ANNUAL G-41 & T-41	0.12589 0.12589 0.12589 0.12589 0.12589 0.12589 0.12589 0.12251 0.0393 0.0393 0.0251 0.0252 0.03535 0.06321 0.06321	
HIGH WINTER LOW ANNUAL G-40 & T-40	0.07812 0.07812 0.07812 0.07812 0.07812 0.07010 0.06024	
OUTDOOR LIGHTING	000000:0 000000:0 000000:0 000000:0 000000	
RESIDENTIAL NON-HEATING R-1 & R-2	0.00653 0.00653 0.00653 0.00653 0.00653 0.00653 0.00552 0.00552 0.00552 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.01014 0.06501 0.06501 0.06501	
RESIDENTIAL HEATING R-3 & R-4	0.64875 0.64875 0.64875 0.64875 0.64875 0.64875 0.64875 0.64875 0.00000 0.52906	
TOTAL	1,00000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1	
ALLOC	EXP773 EXP773 EXP777 LABLM EXP782 INTPLT LABDO EXP851 EXP851 EXP852 EXP852 EXP854 EXP854 EXP878 EXP878 EXP878 EXP878 EXP878 EXP888 EXP888 EXP889 EXP889 EXP892 EXP892 EXP892 EXP892 EXP892 EXP892 EXP892 EXP892 EXP892 EXP892 EXP892 EXP892 EXP892 EXP922	
INTERNALLY DEVELOPED CONT-38	Acct 735-Miscellaneous Production Exp 3 Acct 775-Miscellaneous Production Exp 3 Acct 777-Lease Expense 4 LNG Gas Prod Labor Accts 781 to 782 Acct 781-Maintenance of Struct & Improv 6 Acct 781-Maintenance of Struct & Improv 6 Acct 781-Maintenance of Production Eq 7 Total Intangible Plant 1 Total Intangible Plant 1 Total Intangible Plant 1 Acct 851-Sys Control & Load Dispatch 1 Acct 857-Measuring & Regul Stat Exp 1 Acct 874-Mains and Services Exp 1 Acct 879-Customer Installations Exp 1 Acct 879-Customer Installations Exp 1 Acct 886-Maintenance of Mains 2 Acct 889-Maint of Compressor Station Eq 22 Acct 889-Maint of Compressor Station Eq 22 Acct 889-Maint of Meas & Reg Station Eq 22 Acct 889-Maint of Meas & Reg Station Eq 22 Acct 894-Maintenance of Mains 2 Acct 894-Maintenance of Other Equip 26 Customer Accts Labor Accts 902 to 903 27 Acct 902-Meter Reading Expenses 2 Acct 902-Meter Reading Expenses 2 Acct 902-Administrative & General Sal 3 Acct 912-Demonstrating & Selling Exp 31 Acct 913-Advertising Exp 32 Acct 922-Administrative Exp Transf-Cr 34 Acct 922-Administrative Exp Transf-Cr 35 Acct 922-Administrative Exp Transf-Cr 36 Acct 922-Administrative Exp Transf-Cr 36 Acct 922-Injuries & Damages 3 Acct 922-Injuries & Damages 3 Acct 922-Injuries & Damages 3 Acct 928-Regulatory Commission Exp Acct 928-Regulatory Commission Exp	

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 177 of 322

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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Attachment AG-22-44

		HIGH WINTER	LOW WINTER	LOW WINTER	LOW WINTER	LOW WINTER	
	ALLOC	LRG HI ANNUAL G-43 & T-43	LOW ANNUAL G-50 & T-50	MED ANNUAL G-51 & T-51	HIGH ANNUAL G-52 & T-52	LRG HI ANNUAL G-53 & T-53	
INTERNALLY DEVELOPED CONT-38							
Acct 759-Handling Expense	EXP759	0.01413	0.00543	0.01828	0.01391	0.02586	
Acct 775-Miscellaneous Production Exp	EXP775	0.01413	0.00543	0.01828	0.01391	0.02586	
Acct 777-Lease Expense	EXP777	0.01413	0.00543	0.01828	0.01391	0.02586	
LNG Gas Prod Labor Accts 781 to 782	LABLM	0.01413	0.00543	0.01828	0.01391	0.02586	
Acct 781-Maintenance of Struct & Improv	EXP781	0.01413	0.00543	0.01828	0.01391	0.02586	
Acct 782-Maintenance of Production Eq	EXP782	0.01413	0.00543	0.01828	0.01391	0.02586	
Total Intangible Plant	INTPLT	0.01058	0.01387	0.02782	0.02358	0.04033	
Total Production Plant	PRODPLT	0.01413	0.00543	0.01828	0.01391	0.02586	
Trans & Distr Op Labor Accts 851 to 881	LABDO	0.01127	0.01608	0.03499	0.02750	0.04424	
Acct 851-Sys Control & Load Dispatch	EXP851	0.00000	0.00000	0.0000	0.00000	0.00000	
Acct 852-Communication System Exp	EXP852	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 857-Measuring & Regul Stat Exp	EXP857	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 874-Mains and Services Exp	EXP874	0.01193	0.01152	0.02402	0.02653	0.04731	
Acct 878-Meter & House Regulator Exp	EXP878	0.00200	0.02599	0.04103	0.01536	0.00708	
Acct 879-Customer Installations Exp	EXP879	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 880-Other Expenses	EXP880	0.01173	0.01543	0.03425	0.02802	0.04611	
Acct 881-Rents	EXP881	0.02009	0.00851	0.03429	0.03992	0.07936	
Trans & Distr Maint Lab Accts 851 to 881	LABDM	0.01302	0.01192	0.02757	0.02869	0.05149	
Acct 886-Maintenance of Struct & Improv	EXP886	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 887-Maintenance of Mains	EXP887	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 888-Maint of Compressor Station Eq	EXP888	0.00000	0.00000	0.0000	0.00000	0.0000	
Acct 889-Maint of Meas & Reg Station Eq	EXP889	0.02009	0.00851	0.03429	0.03992	0.07936	
Acct 892-Maintenance of Services	EXP892	0.00089	0.01559	0.01010	0.00840	0.00390	
Acct 893-Mnt of Meters and House Regul	EXP893	0.00200	0.02599	0.04103	0.01536	0.00708	
Acct 894-Maintenance of Other Equip	EXP894	0.02009	0.00851	0.03429	0.03992	0.07936	
Customer Accts Labor Accts 902 to 903	LABCA	0.00255	0.01484	0.01216	0.00661	0.01012	
Acct 902-Meter Reading Expenses	EXP902	0.00054	0.01256	0.00755	0.00234	0.00219	
Acct 903-Cust Records & Collection Exp	EXP903	0.00281	0.01514	0.01276	0.00716	0.01115	
Sales Expenses Labor Accts 912 to 916	LABSA	0.00984	0.01115	0.02497	0.02658	0.05558	
Acct 912-Demonstrating & Selling Exp	EXP912	0.00962	0.01121	0.02477	0.02628	0.05506	
Acct 913-Advertising Exp	EXP913	0.01678	0.00937	0.03128	0.03561	0.07168	
Acct 916-Miscellaneous Sales Exp	EXP916	0.01359	0.01019	0.02838	0.03145	0.06427	
Acct 920-Administrative & General Sal	EXP920	0.00866	0.01434	0.02483	0.02038	0.03300	
Acct 921-Office Supplies & Expenses	EXP921	0.00866	0.01434	0.02483	0.02038	0.03300	
Acct 922-Administrative Exp Transf-Cr	EXP922	0.00866	0.01434	0.02483	0.02038	0.03300	
Acct 923-Outside Services Employed	EXP923	0.00884	0.01332	0.02394	0.01946	0.03153	
Acct 924-Property Insurance	EXP924	0.0000	0.00000	0.0000	0.0000	0.0000	
Acct 925-Injuries & Damages	EXP925	0.00866	0.01434	0.02483	0.02038	0.03300	
Acct 926-Employees Pensions & Benef	EXP926	0.00992	0.01404	0.02682	0.02247	0.03780	
Acct 928-Regulatory Commission Exp	EXP928	0.00866	0.01434	0.02483	0.02038	0.03300	

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 178 of 322

Attachment AG-22-44

. TOTAL COMPANY INPUT	Page 9 . Line 17 Page 9 . Line 20 Page 9 . Line 21 Pg 19 . Ln 21 to 22	Page 9 , Line 24 Page 9 , Line 25 Page 2 , Line 5 Page 2 , Line 20	Pg 20, Ln 2 to 9 Page 11, Line 2 Page 11, Line 3 Page 11, Line 4	Page 11, Line 6 Page 11, Line 7 Page 11, Line 8 Page 11, Line 9	Pg 20, Ln 12 to 18 Page 11, Line 12 Page 11, Line 13 Page 11, Line 14 Page 11, Line 14		Pg 21, Ln6 to 8 Page 12, Line 28 Page 12, Line 32 Page 13, Line 1 Page 13, Line 4 Page 13, Line 5 Page 13, Line 5 Page 13, Line 38 Page 13, Line 34 Page 14, Line 4 Page 14, Line 4
ALLOC	EXP759 EXP775 EXP777 LABLM	EXP781 EXP782 INTPLT PRODPLT	LABDO EXP851 EXP852 EXP857 EXP874	EXP878 EXP879 EXP880 EXP881	LABDM EXP886 EXP887 EXP888	EXP892 EXP893 EXP893 EXP804 LABCA EXP902	[ABSA EXP912 EXP913 EXP920 EXP921 EXP922 EXP923 EXP924 EXP924 EXP926 EXP926 EXP926
INTERNALLY DEVELOPED CONT-38			9 Trans & Distr Op Labor Accts 851 to 881 10 Acct 851-Sys Control & Load Dispatch 11 Acct 852-Communication System Exp 12 Acct 857-Measuring & Regul Stat Exp 13 Acct 874-Mains and Services Exp		18 Trans & Distr Maint Lab Accts 851 to 881 19 Acct 886-Maintenance of Struct & Improv 20 Acct 887-Maintenance of Mains 21 Acct 888-Maint of Compressor Station Eq. 22 Acct 889-Maint of Compressor Station Eq. 23 Acct 889-Maint of Mass & Ren Station Fro		29 Sales Expenses Labor Accts 912 to 916 30 Acct 912-Demonstrating & Selling Exp 31 Acct 913-Advertising Exp 32 Acct 916-Miscelaneous Sales Exp 33 Acct 920-Administrative & General Sal 34 Acct 921-Office Supplies & Expenses 35 Acct 922-Outside Services Employed 37 Acct 924-Property Insurance 38 Acct 925-Injuries & Damages 39 Acct 926-Employees Pensions & Benef 40 Acct 928-Regulatory Commission Exp

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
	10:27 AM	

29-Jun-05

HIGH WINTER HIGH ANNUAL G-42 & T-42	Bay State Gas Com  0.003377  0.003377  0.003377  0.00338  0.003928	pany )5-27 44(1) f 322
HIGH WINTER MED ANNUAL G-41 & T-41	0.07828 0.07828 0.12589 0.12589 0.12589 0.12589 0.12589 0.08201 0.08201 0.08201 0.08201 0.08268 0.08648 0.08648 0.08648 0.08612 0.08568 0.04540 0.12251	
HIGH WINTER LOW ANNUAL G-40 & T-40	0.07126 0.07126 0.07127 0.07812 0.07812 0.07812 0.07501 0.07501 0.07501 0.05705 0.06908 0.06904 0.06904 0.06024	
OUTDOOR LIGHTING	0.00000 0.000000	
RESIDENTIAL NON-HEATING R-1 & R-2	0.06501 0.06501 0.06503 0.00653 0.00653 0.00653 0.00653 0.005179 0.05503 0.05651 0.01014	
RESIDENTIAL HEATING R-3 & R-4	0.63561 0.61352 0.64875 0.64875 0.64875 0.64875 0.64875 0.65278 0.72861 0.60358 0.60368 0.60368 0.60368 0.60368 0.60368 0.60368 0.60368 0.62806 0.52806 0.52806 0.52806 0.52806 0.52806 0.52806 0.52806 0.52806 0.52806 0.52806 0.52806 0.64875 0.64875 0.64875	
TOTAL	1,00000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0	
ALLOC	EXP930 EXP930 EXP931 ILABPO ILABPM ILABPM ILABCA ILT36780 PLT3679 PLT3671C PLT3	
INTERNALLY DEVELOPED CONT-39	Acct 930-Miscellaneous General Exp 2 Acct 930-Miscellaneous General Exp 3 Acct 931 Rents 4 Total LPG Gas Operating Labor 7 Total LPG Gas Operating Labor 7 Total LNG Gas Manintenence Labor 7 Total Cas Manintenence Labor 7 Total Transm & Distr Maintenance Labor 7 Total Transm & Distr Maintenance Labor 10 Total Transm & Distr Maintenance Labor 11 Total Customer Accounts 1.abor 11 Total Customer Accounts 91.2 to 91.3 Total General Plant 1 Acct 381, 382 & 383. Meters & Hee Reg 17 Acct 380, 381, 382 & 383. Meters & Hee Reg 19 Acct 380, 381, 382 & 383. Serv.Met & Reg 19 Transm & Distr Oper Accts 851 to 879 20 Total Customer Deposits 2 Acct 380-4 Uncollectible Accts-Other Rev 25 Acct 387-Gas Mains - Bars Steel 2 Acct 387-Gas Mains - Cast Iron 3 Acct 387-Gas Mains - Cast Iron 3 Acct 387-Gas Mains - Cast Steel 3 Acct 387-Comm Equip Metscan 3 Acct 391-Office Equipment 3 Acct 391-Office Equipment 4 Acct 391-Office Equipment 5 Acct 367-Gas Mains - Cast Steel 5 Acct 367-Gas Mains - Cast Stee	

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 180 of 322

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 200	
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Attachment AG-22-44

	LOW WINTER LRG HI ANNUAL G-53 & T-53	0.00000 0.03300 0.01909 0.02586 0.02586 0.02586 0.0424 0.01012 0.0558 0.03300 0.01012 0.0558 0.03744 0.0558 0.04731 0.00476 0.07936 0.07936 0.07936 0.07936 0.07936 0.07936 0.07936 0.07936 0.07936 0.07936 0.07936 0.07936	0.00708 0.00708 0.02586 0.02586
	LOW WINTER LOW HIGH ANNUAL LRG H G-52 & T-52 G-5	0.00000 0.02285 0.01285 0.01391 0.01391 0.01391 0.01391 0.02869 0.02869 0.02865 0.02885 0.02885 0.02885 0.02892 0.03892 0.03992 0.03992 0.03992 0.03992 0.03992 0.03992 0.03992 0.03992 0.03992 0.03992 0.03992 0.03992	0.01536 0.01536 0.01391 0.01394
COMPANY VICE STUDY SEMBER 31, 2004	LOW WINTER I MED ANNUAL P G-51 & T-51	0.00000 0.02483 0.03556 0.01828 0.01828 0.01828 0.01828 0.02499 0.02497 0.02493 0.02483 0.02483 0.02483 0.02483 0.02483 0.02483 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429 0.03429	0.04103 0.04103 0.01828 0.01828
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50	0.00000 0.01434 0.02139 0.00543 0.00543 0.00543 0.00543 0.01484 0.01192 0.01484 0.01142 0.01484 0.01152 0.01539 0.01539 0.01539 0.01539 0.01543 0.00851 0.00851 0.00851 0.00851 0.00851 0.00851 0.00851 0.00851 0.00851 0.00851 0.00851 0.00851	0.02599 0.02599 0.00543 0.00543
	HIGH WINTER LRG HI ANNUAL G-43 & T-43	0.00000 0.00866 0.00866 0.00866 0.01413 0.01413 0.01413 0.01413 0.01413 0.01413 0.0132 0.00866 0.01193 0.00866 0.01193 0.00099 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009 0.02009	0.00200 0.00200 0.01413 0.01413
10:27 AM	ALLOC	EXP929 EXP930 EXP930 EXP931 ILABPO ILABPM ILABLO IL	PL 1397M PL 7397E PL 7304L PL 7305L
29-Jun-05	INTERNALLY DEVELOPED CONT-39		33 Acct 397-Comm Equip Metscan 34 Acct 397-Comm Equip ERT/ITRON 35 Acct 304 Lnd Rghts-LNG & LPG Dir Csts 36 Acct 305 St & Impr-LNG & LPG Dir Csts

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 181 of 322

Attachment AG-22-44

		ALLOC	INPUT
	INTERNALLY DEVELOPED CONT-39		
<b>4</b>	Acct 929-Duplicate Charges-Cr	EXP929	Page 14 , Line 8
2	Acct 930-Miscellaneous General Exp	EXP930	Page 14 , Line 12
33	Acct 931 Rents	EXP931	Page 14 , Line 18
4	Acct 932 Maintenance of General Plant	EXP932	4
S	Total LPG Gas Operating Labor	TLABPO	တ်
9	Tot LPG Gas Maintenence Labor	TLABPM	<u>.</u>
7	Total LNG Gas Operating Labor	TLABLO	
80	Tot LNG Gas Maintenence Labor	TLABLM	Page 19 , Line 21
o,	Total Transm & Distr Operating Labor	TLABDO	Page 20 , Line 10
10	Total Transm & Distr Maintenance Labor	TLABDM	Page 20 , Line 19
4 4	Total Customer Accounts Labor	TLABCA	Page 21 , Line 4
12	Total Sales Expense Labor	TLABSA	Page 21, Line 9
5	Total General Plant	GENPLT	Pg 4, Ln 3 & 17
14	Claimed Sales Revenues less Gas Costs	REVCLAIM	See Allocator Descriptions
15	Sales Expense Accounts 912 to 913	EXP9123	Pg 12, Ln 28 & 32
16	Acct 367 Mains and Acct 380 Services	PLT36780	Pg 3, Ln 11 & 14
17	Acct 381, 382 & 383 - Meters & Hse Reg	PL T3813	Pg 3, Line 15, 16 & 17
18	Acct 380,381,382 & 383 - Serv.Met & Reg	PLT3803	Pg 3, Line 14, 15, 16 & 17
30		EXP8519	Pg 11, Line 2 to 7
20	Total Customer Deposits	TOTCDEP	Page 7 , Line 23
23	Acct 386 Other Property on Cust's Prem	PLT386	Page 3 , Line 21
22	Total Transmission & Distribution Plant	DISTRPLT	Page 3 , Line 23 & 25
23	Acct 904-Uncollectible Accts-Gas Sales	EXP904S	, Line 9 to 19
24	Acct 904-Uncollectible Accts-Other Rev	EXP9040	Page 12, Line 22 & 23
25	_	PLT367BS	Page 3 , Line 4
26	-	PLT367JC	Page 3 , Line 5
27	_	PLT367C!	Page 3 , Line 6
28	Acct 367-Gas Mains - Cathodic Protect	PLT367CP	Page 3 , Line 7
29	-	PLT367CS	Line
30		PLT367P	Page 3, Line 9
31	Acct 391-Office Equipment	PLT3910E	
32	Acct 391-Office IT Equipment	PLT3911T	Page 4 , Line 5
33		PLT397M	Page 4, Line 13
34	-	PLT397E	Page 4 , Line 14
35		PLT304L	Page 2 , Line 6 & 7
36		PLT305L	Page 2 , Line 10 & 11
37	_	PLT320L	Page 2 , Line 15 & 16
38		OMLAB	Page 22 , Line 15
30	Inflation Adjustment Residual O&M	OTHOMINE	See Allocator Descriptions

TOTAL COMPANY

39 Inflation Adjustment Residual O&M

OTHOMINF See Allocator Descriptions

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Page 40-1

HIGH WINTER HIGH ANNUAL G-42 & T-42	0.04729 0.01724	Attachmer	Gas Company D.T.E. 05-27 nt AG-22-44(1) age 182 of 322
HIGH WINTER MED ANNUAL G-41 & T-41	0.10636	0.08768 0.07844 0.01666 0.08952 0.08768 0.08141 0.08756 0.10119 0.08952	
HIGH WINTER LOW ANNUAL G-40 & T-40	0.06498	0.06949 0.07527 0.05910 0.07038 0.06949 0.07038 0.06994	
OUTDOOR LIGHTING	0.00001	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	
RESIDENTIAL NON-HEATING R-1 & R-2	0.01704	0.05364 0.06585 0.11808 0.05523 0.06055 0.05364 0.02608 0.05563 0.05523	
RESIDENTIAL HEATING R-3 & R-4	0.67732	0.60903 0.63593 0.78471 0.61288 0.60903 0.60885 0.66685 0.66685 0.65050	
TOTAL	1.00000	1,00000 1,00000 1,00000 1,00000 1,00000 1,00000 1,00000 1,00000	
ALLOC	GASCOSTS EXP903T	BASISTP BASISTOM BASISTI BASISTI BASISTO BASISTOM BASISTOM BASISTOM BASISTOM BASISTOM BASISTOM	
INTERNALLY DEVELOPED CONT-40	1 Total Gas Supply Expense 2 Acct 903-Cust Records & Coll Subtotal	NiSource Service Charges Allocators   1	

Attachment AG-22-44

BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004

10:27 AM

29-Jun-05

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 183 of 322

	LOW WINTER LRG HI ANNUAL G-53 & T-53	0.00854	0.04310 0.03145 0.00024 0.04310 0.04324 0.04324 0.01279 0.04027 0.03126
-	LOW WINTER HIGH ANNUAL G-52 & T-52	0.00722	0.02530 0.01908 0.00089 0.02535 0.02539 0.01808 0.01878
S COMPANY FRVICE STUDY ECEMBER 31, 2004	LOW WINTER MED ANNUAL G-51 & T-51	0.03671	0.02667 0.02470 0.00624 0.00264 0.02667 0.02661 0.03449 0.02784 0.02267
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LOW ANNUAL G-50 & T-50	0.01517	0.01304 0.01506 0.01179 0.01389 0.01378 0.01378 0.01378 0.01378
	HIGH WINTER LRG HI ANNUAL G-43 & T-43	0.00284	0.00117 0.00839 0.00005 0.01067 0.01117 0.00962 0.01138 0.01057 0.00820
10:27 AM	ALLOC	GASCOSTS EXP903T	BASIS1P BASIS1OM BASIS10 BASIS2 BASIS20 BASIS20 BASIS7P BASIS7P BASIS7OM BASIS9 BASIS9
29-Jun-05	INTERNALLY DEVELOPED CONT-40	Total Gas Supply Expense Acct 903-Cust Records & Coll Subtotal	NiSource Service Charges Allocators Basis 1 - 50% Gross Plant Basis 1 - 50% O&M less Gas & NiS 923 Basis 10 - Number of Annual Customers Basis 11 - Labor Basis 2 - Gross Plant Basis 2 - Total Direct Billed Basis 7 - 50% Deprec Plant Basis 7 - 50% O&M less NIS 923 Basis 7 - 50% O&M less NIS 923 Basis 7 - 50% O & Deprece Plant Basis 8 - Labor Basis 9 - Labor

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 184 of 322

TOTAL COMPANY

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INPUT	Page 10 , Line 7 Pg 12 , Line 3 to 5							Page 4 , Line 18	See Allocator Descriptions	Page 20 Line 31	Page 22 , Line 21	Page 4 . Line 18	Page 13 , Line 28	See Allocator Descriptions	See Allocator Descriptions	Page 22 , Line 21																
ALLOC	GASCOSTS EXP903T							BASIS1P	BASISTOM	BASIS11	BASIS2	BASIS20	BASIS7P	<b>BASIS70M</b>	BASIS9	BASC012																
INTERNALLY DEVELOPED CONT-40	Total Gas Supply Expense Acct 903-Cust Records & Coll Subtotal						NiSource Service Charges Allocators	æ		Basis 10 - Nullibel of Artifical Custoffiels  Resis 11 - Labor	Basis 2 - Gross Plant	Basis 20 - Total Direct Billed	Basis 7 - 50% Deprec Plant	Basis 7 - 50% O&M less NIS 923	Basis 9 - Labor	Basis Co 12 - Oth NiSource Serv Chrgs																
	£~ C1 C	24	S	7	œ	φ <u>C</u>	<del>-</del>	72	رب دی د	4 12	\$ 42	17	18	19	20	21	22	23	24	22	26	27	2 5	30	31	32	33	34	S &	37	38	86

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 185 of 322

Attachment AG-22-44	HIGH WINTER HIGH WINTER MED ANNUAL HIGH ANNUAL G-41 & T-41 G-42 & T-42	0.09792 0.04663
94	HIGH WINTER LOW ANNUAL G-40 & T-40	0.06674
BAY STATE GAS COMPANY AS COST OF SERVICE STUDY NTHS ENDED DECEMBER 31, 200	OUTDOOR	0.00001
BAY STATE GAS COMPANY GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	RESIDENTIAL NON-HEATING R-1 & R-2	0.02263
₹ <del>-</del>	RESIDENTIAL HEATING R-3 & R-4	0.67571
	TOTAL COMPANY	1.00000
10:27 AM	ALLOC	
29-Jun-05	INTERNALLY DEVELOPED CONT-41	REVENUES FROM GAS SALES Revenues Firm Sales of Gas

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 186 of 322

6/30/2005 11:12 AM

BAY STATE GAS COMPANY	GAS COST OF SERVICE STUDY	12 MONTHS ENDED DECEMBER 31, 2004
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Attachment AG-22-44

GAS COST OF SERVICE STUDY 12 MONTHS ENDED DECEMBER 31, 2004	LOW WINTER LRG HI ANNUAL G-53 & T-53
	LOW WINTER HIGH ANNUAL G-52 & T-52
	LOW WINTER MED ANNUAL G-51 & T-51
	LOW WINTER LOW ANNUAL G-50 & T-50
	HIGH WINTER LRG HI ANNUAL G-43 & T-43
10:27 AM	ALLOC
29-Jun-05	

0.01738

0.01883

0.03184

0.01207

0.01024

INTERNALLY DEVELOPED CONT-41

REVENUES FROM GAS SALES Revenues Firm Sales of Gas

10 9 8 4 3 5 4 9 5 9

Bay State Gas Company D.T.E. 05-27 Attachment AG-22-44(1) Page 187 of 322

6/30/2005 11:12 AM

29-Jun-05 10:27 AM

Attachment AG-22-44

ALLOC

TOTAL COMPANY INPUT

REVENUES FROM GAS SALES
Revenues Firm Sales of Gas
Revenues Firm Sales of Gas